



RESOURCE MANAGEMENT COMMITTEE
Robert K. Lindsey, Jr., Interim Chairperson
Leina'ala Ahu Isa, At-Large
Dan Ahuna, Kaua'i
Kalei Akaka, O'ahu
Keli'i Akina, At-Large
Brendon Kalei'aina Lee, At-Large
Carmen Hulu Lindsey, Maui
Colette Y. Machado, Moloka'i/Lāna'i
John Waihe'e IV, At-Large

**STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS**

**MEETING OF THE COMMITTEE ON
RESOURCE MANAGEMENT**

DATE: Wednesday, February 13, 2019
TIME: 10:00 am
PLACE: OHA Board Room, Nā Lama Kukui
560 N. Nimitz Hwy., Suite 200
Honolulu, HI 96817

AGENDA

- I. Call to Order
- II. Public Testimony*
- III. Approval of Minutes[†]
 - A. January 9, 2019
- IV. Unfinished Business
 - A. Discussion of OHA baseline spending vs. investment - SPIRE Hawaii (Certified Public Accountants for Fiscal Sustainability)[‡]
- V. New Business
 - A. NHTF 3rd Quarter Portfolio Review with Investment Consultant Segal Marco and Investment Staff
 - B. State Street Global Advisors Discussion of Funds and Market Environment
 - C. Action Item RM 19-01: Member approval of procedures to change the management structure of Hi'ilei Aloha LLC and Ho'okele Pono LLC[†]
- VI. Executive Session[†]
 - A. Approval of Minutes - January 9, 2019[†]
 - B. Consultation with attorneys William Yuen, Esq., Judy Tanaka, Esq. and Robert Klein, Esq. on OHA's powers, privileges and liabilities regarding OHA's role as member of Hi'ilei Aloha LLC and Ho'okele Pono LLC and management options for those LLC's. Pursuant to HRS section 92-5(a)(4).
- VII. Announcements
- VIII. Adjournment

If you require an auxiliary aid or accommodation due to a disability, please contact Albert Tiberi at telephone number 594-1754 or by email at albertt@oha.org no later than three (3) business days prior to the date of the meeting.

*Notice: Persons wishing to provide testimony are requested to submit 13 copies of their testimony to the Chief Executive Officer at 560 N. Nimitz, Suite 200, Honolulu, HI, 96817 or fax to 594-1868, or email BOTmeetings@oha.org 48 hours prior to the scheduled meeting. Persons wishing to testify orally may do so at the meeting, provided that oral testimony shall be limited to five minutes.

[†]Notice: The 72 Hour rule, pursuant to OHA BOT Operations Manual, Section 49, shall be waived for distribution of new committee materials.

[‡]Notice: This portion of the meeting will be closed pursuant to HRS § 92-5.

Trustee Robert K. Lindsey, Jr.
Interim Chairperson, Committee on Resource
Management

2/7/19
Date

Office of Hawaiian Affairs

OHA Fiscal Efforts



February 13, 2019

FSP- Where we left off

| | |
|---|---|
| <p>Pension Benefits</p> | <ul style="list-style-type: none"> • Determining the legal ability to go after the perceived legislative changes/policy changes needed in 2 years • Determine political feasibility of achieving changes • Better understand financial benefits and any potential downsides, and other relevant issues related to fringe expenses |
| <p>Legal & Taxable Structure (LLC)</p> | <p>Short-Term</p> <ul style="list-style-type: none"> • Submit recommendation to corporation counsel for legal review • Refine Decision Matrix and Decision Tree, present to board • If approved, use these tools in an analysis of programmatic activities and management of assets <p>Long-Term</p> <ul style="list-style-type: none"> • Develop guidance regarding OHA's role (Funder v. Intermediary v. Direct Services) in strategic planning of OHA operations |
| <p>Department of Hawaiian Homelands</p> | <ul style="list-style-type: none"> • Board level discussion and decision-making with regard to how to classify OHA's commitment to pay for DHHL's debt service • Board level discussion and decision-making with regard to broader Debt Policy • Review annual DHHL reporting and timing of OHA payments; engage in discussions with DHHL |
| <p>Real Estate Investment</p> | <ul style="list-style-type: none"> • Workshop by administration for the RM Committee LLC or RFP? • Clarify the status of OHA's relationship to LLC's • Develop policies that support REI • Business plan for land management |
| <p>Spending Policy</p> | <ul style="list-style-type: none"> • Final approved versions of the IPS, Spending Policy and HDAP should be reviewed and approved by the Advisory Group and recommended to the full BOT for discussion and final approval. • Upon review of all FSP working Groups recommendations, the spending rate is to be evaluated in conjunction with other revenue generating or cost reduction options |

Critical Fiscal Matters - Where are we now

| Topic | Issues | Related Policy |
|-----------------------|---|---|
| Spending | <ul style="list-style-type: none"> OHA currently mixes all of its activities (operations, investments, debts, etc.) under one category which has multiple priorities OHA is not adequately incorporating, coordinating and leveraging State resources to reduce programmatic expenditures OHA's obligations to pay debt, increase fringe rate, and DHHL commitment | Spending policy Investment policy Land policy Debt policy |
| Investment | <ul style="list-style-type: none"> Real estate assets and financial assets should not be managed the same way, but should have collective goals Market volatility will affect financial asset returns OHA needs to set benchmarks for its commercial properties and find solutions for greater returns OHA should consider whether programs are expenditure related or investment related (PRI vs. MRI) How to raise capital for the development of Kaka'ako Makai | Investment policy Real estate assets strategy Debt policy Legal structures |
| Debt | <ul style="list-style-type: none"> OHA does not have a plan to account for the repayment of its debts OHA does not have a policy that explains how and when it uses debt Much of OHA's debt is tied to real assets | Investment policy Debt policy Real estate assets strategy Legal structures |
| Fiscal Reserve | <ul style="list-style-type: none"> OHA needs to resolve its use of the fiscal reserve | Spending policy Investment policy |
| Risk | <ul style="list-style-type: none"> OHA's land assets held in trust put OHA at 100% risk of claims OHA needs to adopt an enterprise risk management framework to help inform its decisions and actions OHA should resolve and respond to all Audit findings | Spending policy Investment policy |

What should OHA do? – Debt and land

Case Study – Nā Lama Kukui Debt

■ Situation overview

- Commercial loan of +\$24 million
- City & County appraised value of approximately \$48 million

■ Issues

- Commercial loan lien against the property and collateralized by the trust fund
- No explicit way to establish payment of the balloon payments
- As an asset in the trust fund, it is vulnerable to claims against the asset as well as the trust fund
- OHA must determine how much debt can be used as leverage against the asset

■ What are the options?

- a. It can refinance the existing commercial loan using the new appraisal value
 - i. Banks would place lien against the property as well as against some amount of the trust fund to meet financing terms
 - ii. Still puts the NHTF at risk as a direct asset of the fund
 - iii. OHA would have to dedicate revenues from NLK to be used for repayment of the financing
- b. Separate NLK by placing it in LLC and then refinancing the debt
 - i. OHA would need to seek legal opinion on placing NLK into an LLC
 - ii. OHA would agree to establish an LLC to hold the asset and OHA would maintain controlling interest in the LLC
 - iii. The LLC would maintain its own financials
 - iv. The LLC would need to shop the refinancing of the NLK, which may require additional seed funds to satisfy the financier
 - v. The LLC would use the profits from its lease revenues to pay for the note

What should OHA do? - Debt/ land case study continued

What has to get done

- Policies
 - Investment policy - segmentation of assets between financial assets and real assets, setting allocation, setting benchmarks and ROI targets as well as describe if monies would be transferred to OHA trust fund
 - Debt policy – determination of debt use, type and terms
- Development of a Real Assets strategy – what is the business plan for real assets
- If option B is taken, establishment of an LLC and seed funding infusion
 - Form LLC and establish equity ownership
 - Infuse seed funding
 - Establish separate accounting
 - Establish property management function
- Financing - seek financing deals, review, negotiate and close
 - Develop deal packet and send to financiers
 - Review and negotiate offers
 - Close finance deal

Resolving financial considerations

Finance – value vs. risk

Value Building

- Driving value into the organization is of the utmost performance for OHA
- How does the current use of NLK add to value to the organization? What is its prime purpose

Mitigate Risk

- Held as part of a Trust, NLK presents a risk to the entirety of all assets.

Assets – financial vs. real

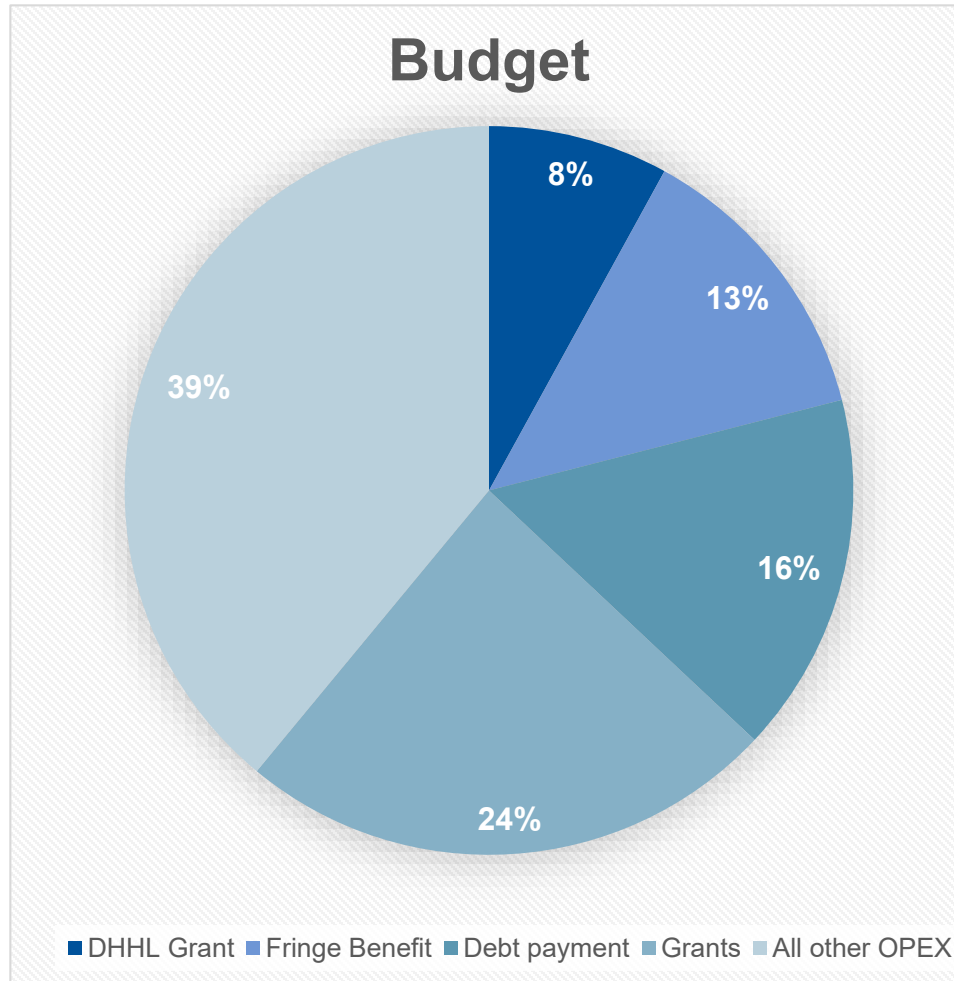
Financial

- Mainly based on OHA's financial securities held in Trust
- Market based earnings
- Forecasted headwinds and volatility may hurt earnings

Real Assets

- Commercial properties need to increase returns to offset and fund costs and potential financing

How is OHA going to pay for these obligations?



Based on a core budget, the estimated annual payment of the NLK debt is approximately 16% of the core operating budget.

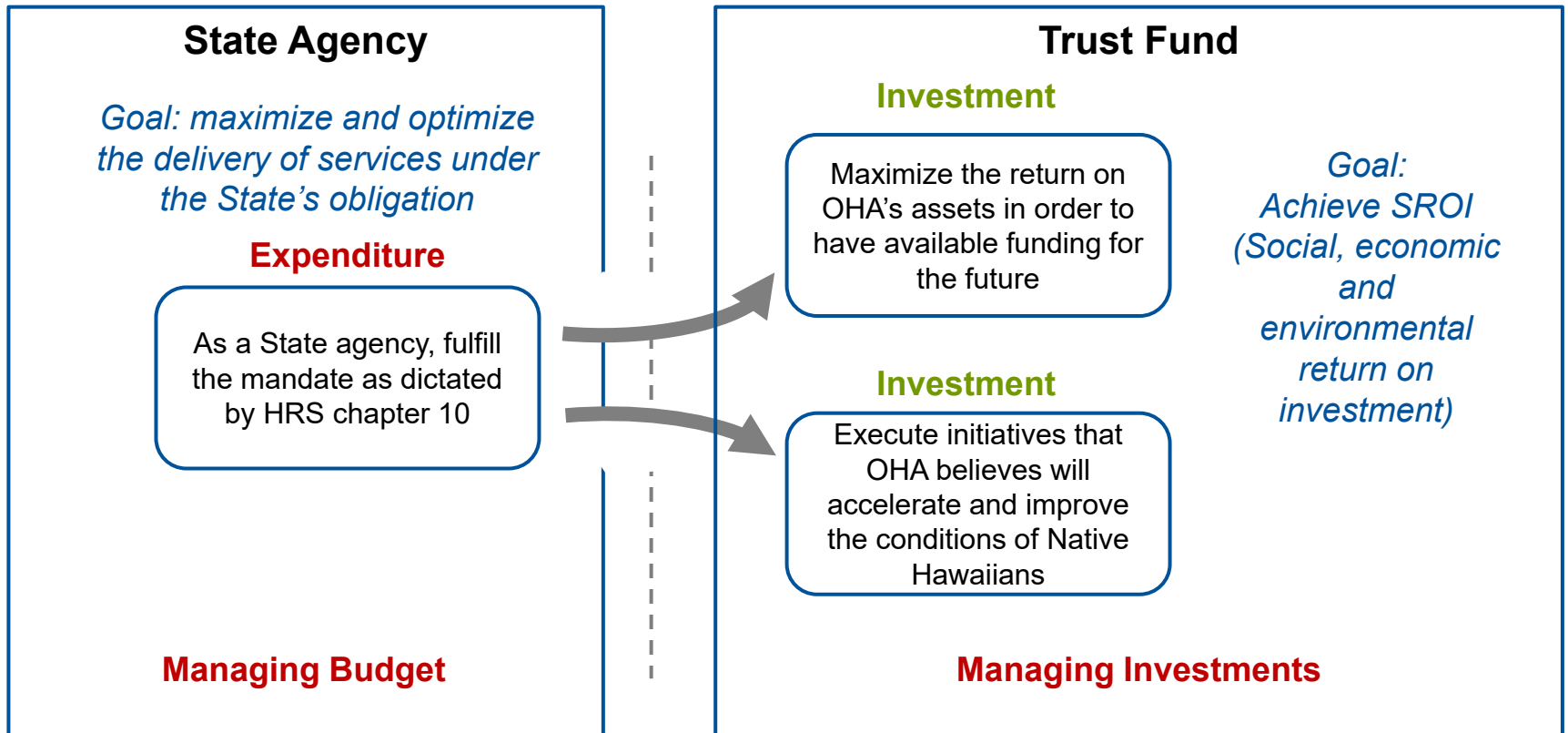
In addition to the NLK debt payment, OHA has other obligations that could have a significant impact on core operating budget. They are as follows:

- Fringe benefit
- DHHL grant
- Community grants

OHA must act quickly and effectively to mitigate the potential effect on its current system.

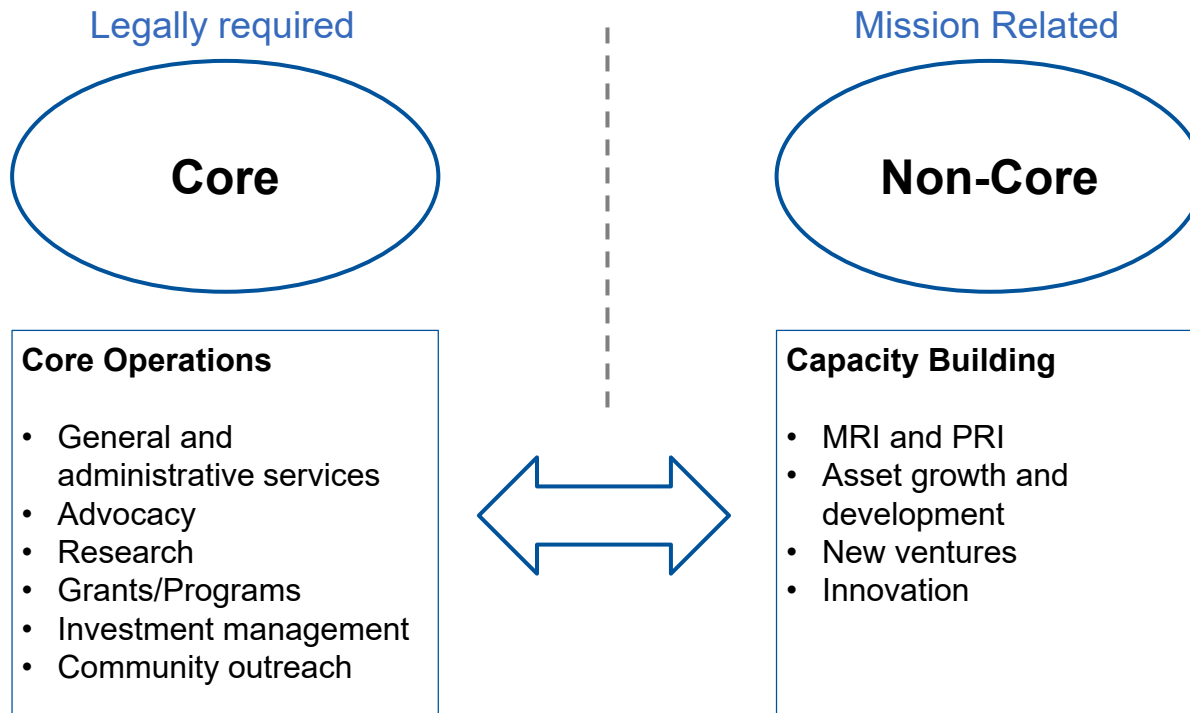
Reconciling the dichotomy

OHA must find a way to reconcile its own identity. Typically, governmental agencies are expenditure based organizations. Yet, OHA also manages a trust for the improvement of Native Hawaiian conditions.



Core versus Non-Core

OHA must establish segmentation and prioritization of how it manages its activities. Some of those are dictated by statute, others are established based on OHA's views of how to improve the conditions of Native Hawaiians.



What can OHA do to address spending challenges?

1. Decrease grants where funding does not correlate with deliverables

- Grants: making certain that all grants, including DHHL, 'Ahahui and Community grants are properly awarded (State Auditor Report 18-08, Recommendation 1, page18), and that applicable performance measures are achieved (Report 18-08, Recommendation 2.a. and 3.b., pages 18-19)
- Non-competitive grants (which represent 65% of grant spending: ensure compliance with HRS chapter 10-17, consider implementing solicitation process and require and enforce metrics consistent with grant amount
- DHHL grant: ensure compliance with HRS chapter 10-17, require and enforce metrics consistent with grant amount
- Grant management in general: adopting information system for improving administration of grant status and deliverables (State Auditor Report 18-08, Recommendation 19, page 30)

2. Review Spending Policy in light of spending challenges – does policy allow challenges to be met?

3. Revise definitions in Fiscal Reserve Guidelines to clarify allowable/unallowable uses

4. Revise definitions in Executive Policy Manual and other OHA policies and reporting forms regarding Trustee Annual Allowance and Trustee Sponsorship and Allowance Fund to be consistent with the Ethics Commission's Findings of Fact, Conclusions of Law, and Decision and Order, COMPL-C-15-00236

What can OHA do to address investment challenges?

- **Adopt best practices for asset allocation (recommended by the State Auditor in Report 18-08, Recommendation 2, page 22)**
- **Assess proposed Business Plan for Land Management (scheduled for completion Q4 2018, recommended by the State Auditor in Report 18-08, recommendation 1, page 21)**
- **Revise, and adopt; assess OHA's investment policies and strategies, make changes if necessary**

Managing the balance sheet

“When the pressure builds to improve performance, most business leaders adopt measures that affect the income statement.

They cut discretionary spending. They centralize support functions. They lop off unnecessary layers of management, eliminate low-value projects and so on, all with an eye to "rightsizing" the cost structure. And of course they do what they can to increase profitable sales.

While all these efforts can boost results, they overlook one of the largest sources of value: the balance sheet. Companies often hold far more working capital than they need to. They make ill-timed or ill-advised capital investments. They own unnecessary or unproductive fixed assets. When management teams focus disproportionately on the P&L, they often miss those issues. In fact, some measures designed to manage costs can actually inflate the balance sheet, consuming cash and destroying value.”

Bain & Company article – Right-Sizing the Balance Sheet

Benefits of Balance Sheet Management

*“Right-sizing the balance sheet offers most companies an enormous opportunity to create shareholder value, in both good times and bad. Granular measures show where capital is currently being deployed. Aggressive management of both working and fixed capital frees up large amounts of cash. New ownership models enable once capital-intensive businesses to prosper with fewer assets. And processes and incentives that encourage careful balance sheet management help ensure sustainable gains. **Over time, right-sizing the balance sheet becomes part of a company’s culture—a culture where managers at every level of the company see the importance of carefully managing assets and liabilities and act accordingly”***

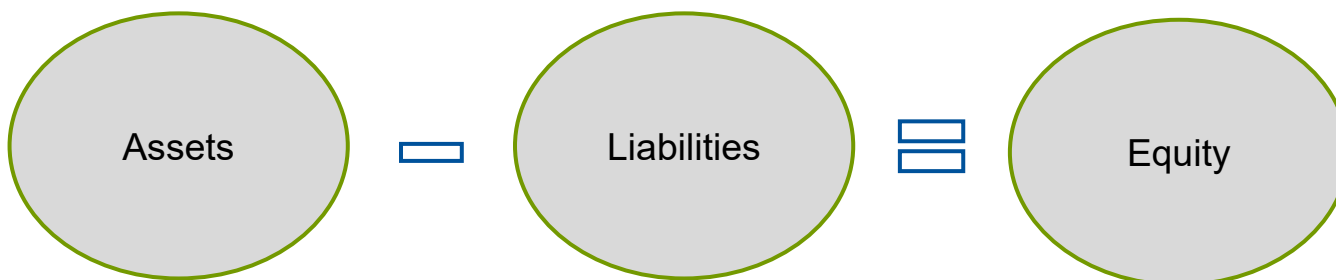
What is balance sheet management



Simply put, **Balance Sheet Management** is the process of planning, coordinating, and directing business activities that directly determine the Assets, Liabilities, and Equity of a company or organization.

For the OHA's Board, refer to OHA's **Statement of Net Position**

What Topics Should the Board Look For?



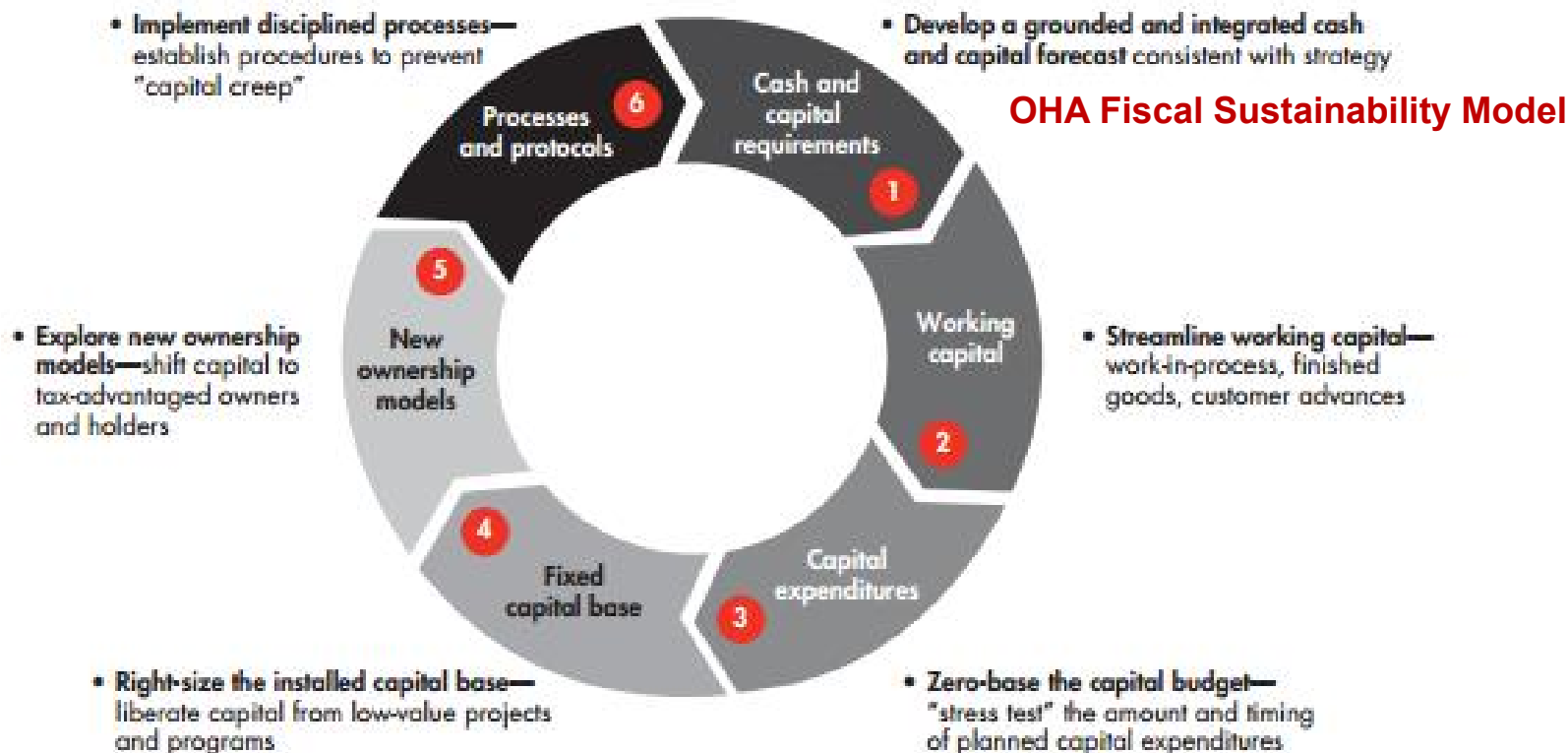
- Treasury – draw down monitoring related to maximization of investment returns
- Investment
 - Monitoring earnings related to both financial and real estate assets
 - Monitoring asset allocation and investment risk
- Asset Protection - protection of NHTF assets against various types of claims
- New sources of revenues

- Debt management – monitoring debt and leveraging activity
- Liquidity – monitoring the organization’s ability to meet its short and long-term obligations

- Wealth management - Monitoring equity gains and losses
- Mission related funding – maximizing benefits
- Sustainability – intergenerational equity

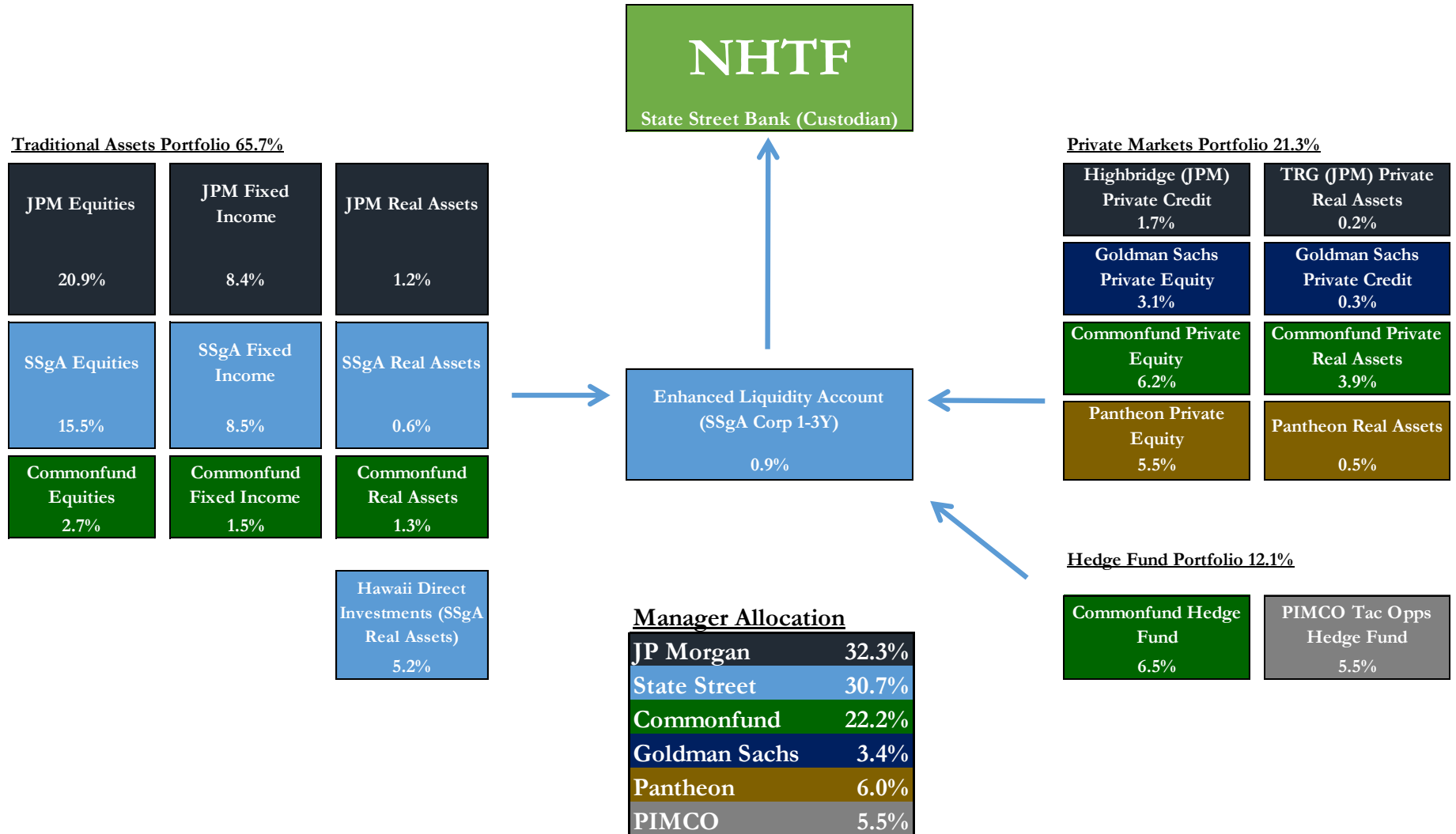
Bain & Company – Balance Sheet Approach

Figure 1. The most effective companies use a six-step approach to cash and capital management



Bain & Company article – “Right sizing the Balance Sheet”

OHA 2Q16 Flow Chart Asset Allocation



Total Trust Fund Fees

| | Quarter to Date (9/30/2018) | Year to Date (9/30/2018) | Inception to Date (3/1/2003) |
|---------------------------------------|--------------------------------|-----------------------------|---------------------------------|
| Commonfund | 328,770 | 1,121,272 | 10,517,399 |
| JP Morgan | 189,408 | 588,818 | 6,414,995 |
| Pantheon ₂ | 72,903 | 215,626 | 2,162,114 |
| Highbridge ₄ | 32,265 | 153,322 | 1,017,327 |
| Goldman Sachs ₁ | 40,857 | 134,627 | 17,882,708 |
| PIMCO ₅ | 78,496 | 123,870 | 123,870 |
| SSGA | 35,557 | 102,173 | 354,718 |
| HDI | 11,662 | 34,562 | 382,610 |
| ELA | 2,500 | 7,500 | 304,541 |
| Total Advisor Fees₆ | 792,418 | 2,481,770 | 48,187,051 |
| Custody Fees ₃ | 57,662 | 172,040 | 1,624,513 |
| Total Fees: | 850,080 | 2,653,810 | 49,811,564 |

₁ Goldman Sachs are lagged by a quarter

₂ Prior to July 2011, Pantheon fees were included with Russell. Fees for Euro denominated funds were converted using the EURO/USD exchange rate

₃ Inception Date for Custody Fees is 1/1/2011. Fees include performance reporting and certain Advisor trading costs.

₄ Highbridge fees were embed with JPM and separately reported in Q1 2018

₅ PIMCO Inception Date is Q4 2017

₆ Total Advisor Fees includes \$9m paid to former advisor Russell Investment in inception to date

Office of Hawaiian Affairs

ANALYSIS OF INVESTMENT PERFORMANCE

Native Hawaiian Trust Fund

September 2018

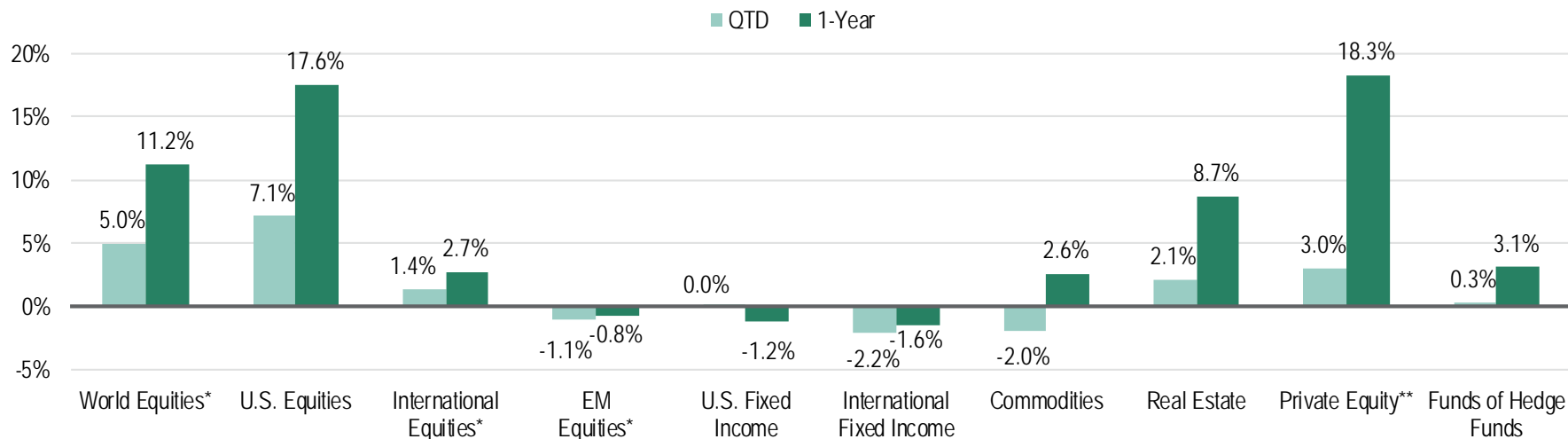
John Marco
Senior Vice President

Craig Chaikin, CFA
Vice President

Financial Market Conditions

Q3 2018 In Review

Summary of Investment Returns



Quarterly Synopsis

- World equity markets rose in Q3. Solid economic and earnings data outweighed global policy uncertainty among investors.
- U.S. equity gained during the quarter. A healthy economy and robust earnings led stocks to rise despite global trade concerns.
- International equity was boosted by stronger economic news and the European Central Bank's statement that it would not hike interest rates until at least the summer of 2019.
- Emerging market equity declined again in Q3 amid U.S. dollar strength, slowing growth in China and nervousness about the collapse of the Turkish lira.
- U.S. fixed income was flat for the quarter. Short-term interest rates rose again in Q3, though longer-term yields increased as well.
- Non-U.S. fixed income declined in Q3 as Italian bonds slid.
- Hedge funds were slightly positive in the quarter. Multi-strategy and macro funds were among the best YTD performers.

* Net of Dividends

** Performance as of Q1 2018 because Q2 2018 and Q3 2018 performance data is not yet available.

Sources: Investment Metrics, Thomson One, FactSet

Q3 2018 Index Returns

| Asset Class | Indices | QTD | YTD | 1-Year | 3-Year | 5-Year | 10-Year |
|------------------------|---|-------|-------|--------|--------|--------|---------|
| World Equity | MSCI World ¹ | 4.98 | 5.43 | 11.24 | 13.54 | 9.28 | 8.56 |
| U.S. Equity | Russell 3000 | 7.12 | 10.57 | 17.58 | 17.07 | 13.46 | 12.01 |
| Non-U.S. Equity | MSCI EAFE ¹ | 1.35 | -1.43 | 2.74 | 9.23 | 4.42 | 5.38 |
| Emerging Market Equity | MSCI EM ¹ | -1.09 | -7.68 | -0.81 | 12.36 | 3.61 | 5.40 |
| U.S. Fixed Income | Bloomberg Barclays U.S. Aggregate | 0.02 | -1.60 | -1.22 | 1.31 | 2.16 | 3.77 |
| Non-U.S. Fixed Income | FTSE ² Non-U.S. WGBI (Unhedged) | -2.19 | -3.09 | -1.57 | 2.39 | -0.23 | 1.99 |
| Commodities | Bloomberg Commodity Index | -2.02 | -2.03 | 2.59 | -0.11 | -7.18 | -6.24 |
| Private Real Estate | NFI-ODCE | 2.09 | 6.48 | 8.68 | 8.80 | 10.72 | 5.58 |
| Private Equity | Thomson Reuters Private Equity ³ | 3.03 | 3.03 | 18.32 | 12.43 | 13.96 | 9.51 |
| Hedge Funds | HFRI Fund of Funds Composite | 0.27 | 0.99 | 3.08 | 3.29 | 3.18 | 2.55 |

¹ Net of Dividends

² Formerly Citigroup Non-U.S. WGBI. Citigroup's fixed income indices were purchased by London Stock Exchange Group (LSEG) and will all be rebranded to FTSE by July 31, 2018. FTSE Russell is a unit of LSEG's Information Services Division and a wholly owned subsidiary of LSEG.

³ Performance as of Q1 2018 because Q2 2018 and Q3 2018 performance data is not yet available.

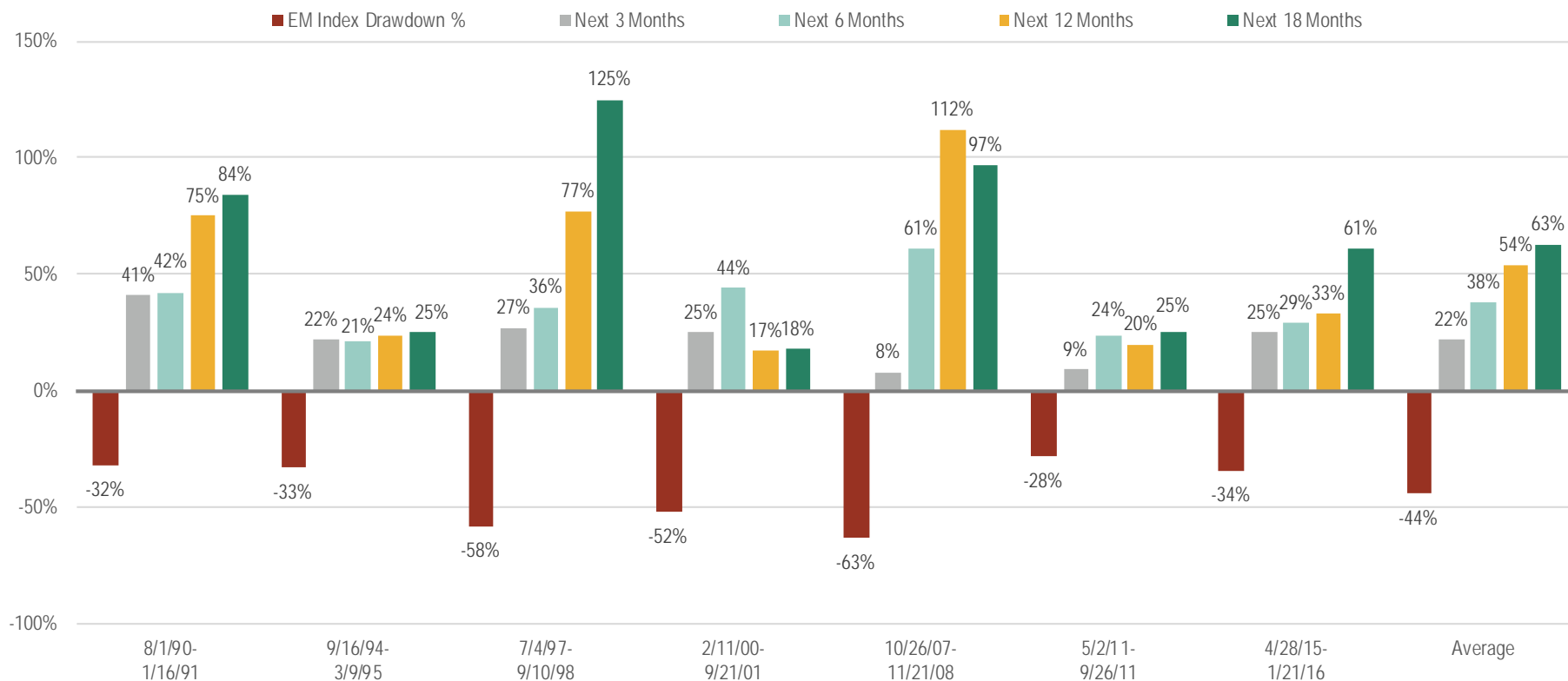
Sources: Investment Metrics, Thomson One, FactSet

Q3 2018 In Review: Noteworthy Developments

Emerging Market Equity - Rebounds After Drawdowns

- Emerging market equity returns have been extremely volatile over the last 30 years, but most major declines have been followed by recoveries that have often been nearly as robust as the declines were precipitous.
- The message with EME, therefore, is clear – patience seems to be rewarded over time, but investors with sensitivity to extremes should be aware of that requirement.

Emerging Market Equity Bear Markets and Subsequent Performance



Q3 2018 In Review: Noteworthy Developments

Revised Life Expectancy's Impact on Plans

- A Bloomberg study measured the health care efficiency of almost 200 economies, using average lifespan, determining medical costs both as a percentage of income and in absolute dollars.
- Americans' life expectancy declined for the second year in a row. Per the CDC, deaths from drug overdoses, chronic liver disease, suicide, Alzheimer's and blood infections have all gone up, resulting in a shortened average life span.
- Impact on pension plans: Lower life expectancy results in higher mortality tables, which reduces pension liabilities.
- The Society of Actuaries (SOA) annually updates the mortality improvement scale for pension plans. For 2017 and 2018 (which reflects age-adjusted U.S. population mortality rates for 2014-15 and 2015-16, respectively), the mortality rates suggest that life expectancies declined slightly each year. Declines two years in a row are rare – the last time life expectancy fell two years in a row, was 1962-63:
 - The 2017 study suggests the new rates could reduce a pension plan's obligations by 0.7% to 1.0% (using a 4% discount rate).
 - The 2018 study suggests the new rates could reduce a pension plan's obligations by 0.3% to 0.5% (using a 4% discount rate).

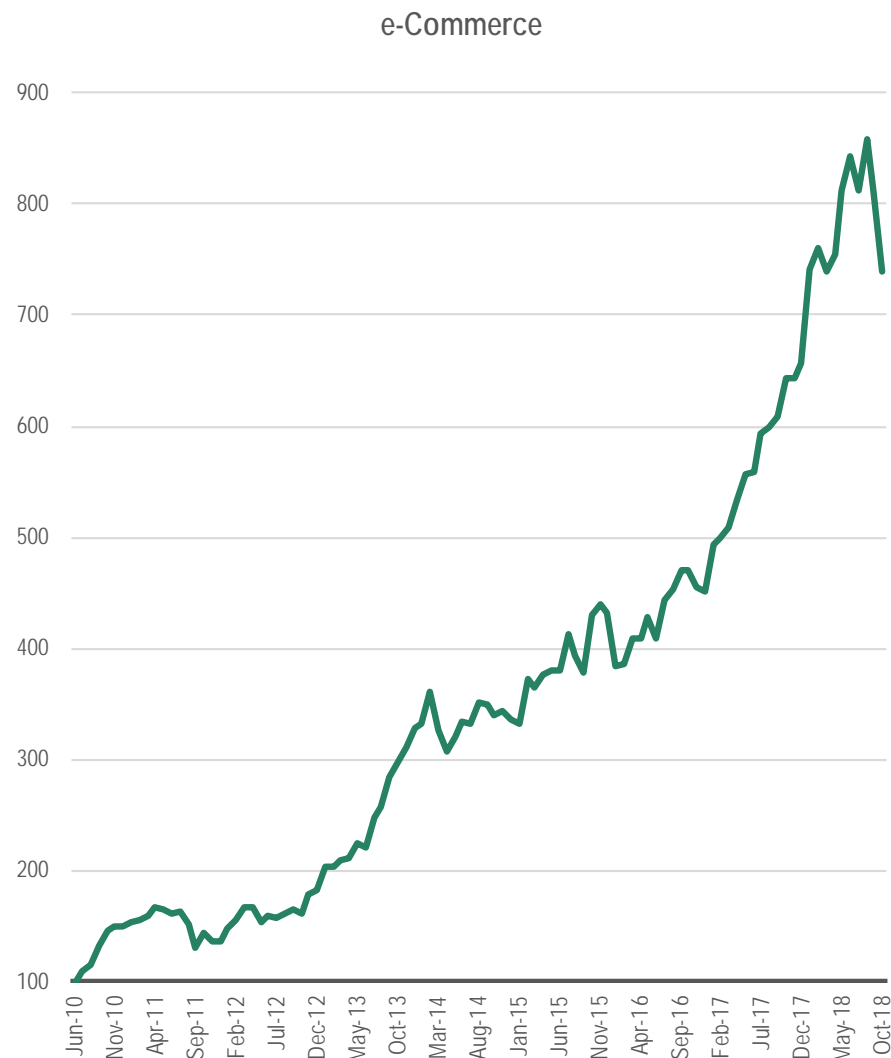
Bloomberg Health Care Efficiency

| Rank | Rank 1 Year Ago | Change | Economy | Efficiency Score | Life Expectancy | Relative Cost % | Absolute Cost \$ |
|------|-----------------|--------|-------------|------------------|-----------------|-----------------|------------------|
| 1 | 1 | - | Hong Kong | 87.3 | 84.3 | 5.7 | 2,222 |
| 2 | 2 | - | Singapore | 85.6 | 82.7 | 4.3 | 2,280 |
| 3 | 3 | - | Spain | 69.3 | 82.8 | 9.2 | 2,354 |
| 4 | 6 | +2 | Italy | 67.6 | 82.5 | 9.0 | 2,700 |
| 5 | 4 | -1 | South Korea | 67.4 | 82.0 | 7.4 | 2,013 |
| 6 | 7 | +1 | Israel | 67.0 | 82.1 | 7.4 | 2,756 |
| 7 | 5 | -2 | Japan | 64.3 | 83.8 | 10.9 | 3,733 |
| 8 | 10 | 2 | Australia | 62.0 | 82.4 | 9.4 | 4,934 |
| 54 | 50 | -4 | U.S. | 29.6 | 78.7 | 16.8 | 9,536 |

Q3 2018 In Review: Noteworthy Developments

Is e-Commerce in Bubble Territory?

- The Dow Jones Internet Commerce Index, which measures the 15 biggest and most actively traded e-commerce stocks (chart at right), is up more than 8x since June 2010 and may now be in bubble territory.
- Increased central bank liquidity, *i.e.* easier access to credit, could be creating an environment for an asset price bubble. Also, the free cash flow yield of the Internet Commerce Index is lower than that of the tech sector in the late 90s (dot-com bubble), making e-Commerce valuations appear frothy in comparison.
- On the other hand, the digital era has fostered business models that lower marginal costs. Many digital technologies are scalable, in that they can be replicated at low or no cost, which is beneficial for the company and, ultimately, the consumer. Improved and less expensive AI capabilities could translate into more product sales, higher subscription premiums or better-focused advertising for internet companies.
- As outlined above, there are points and counterpoints to the question of whether e-Commerce is in a valuation bubble. But it seems likely that investors will see changes to the top players in e-Commerce as technology continues to evolve and digital disruptions keep occurring.

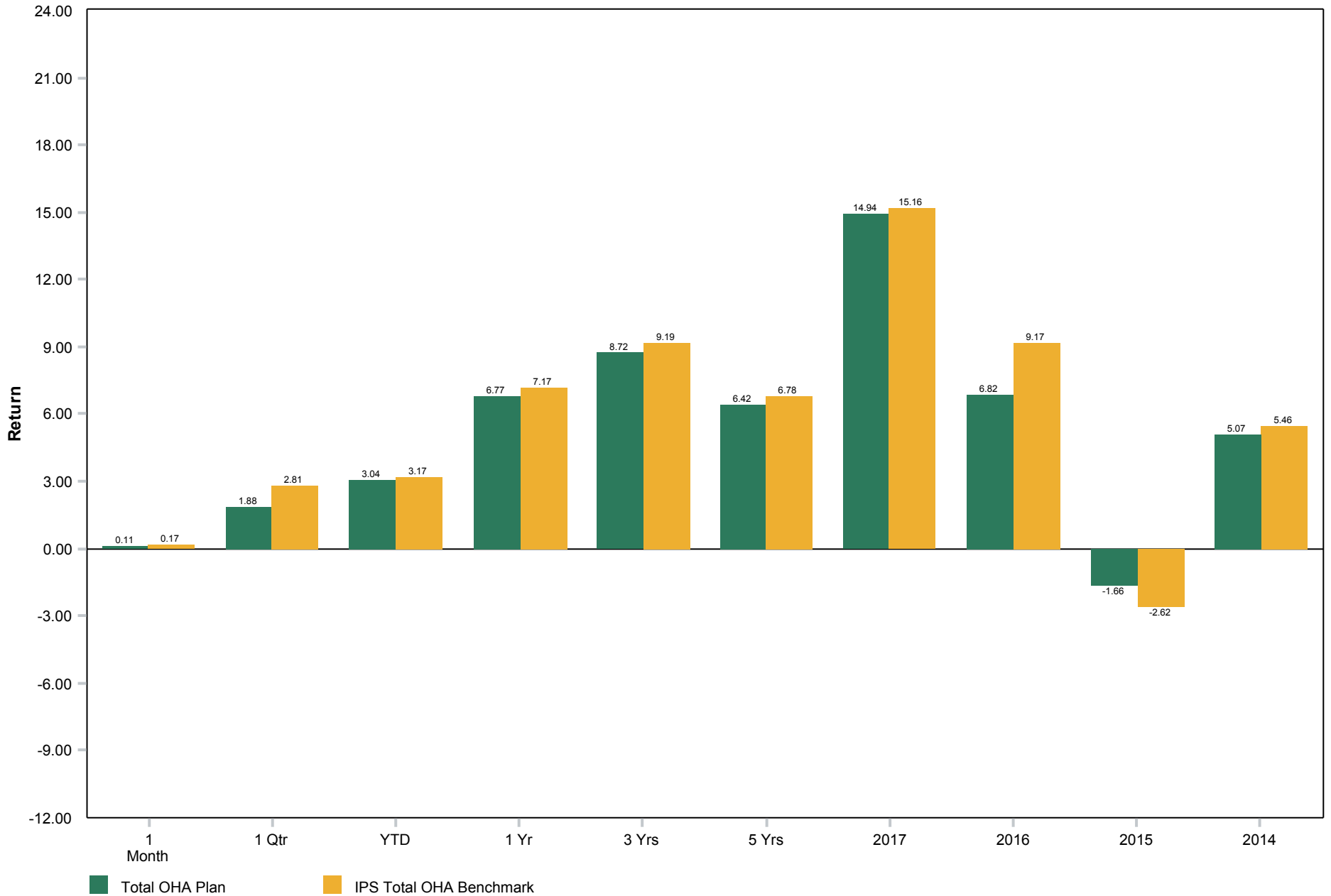


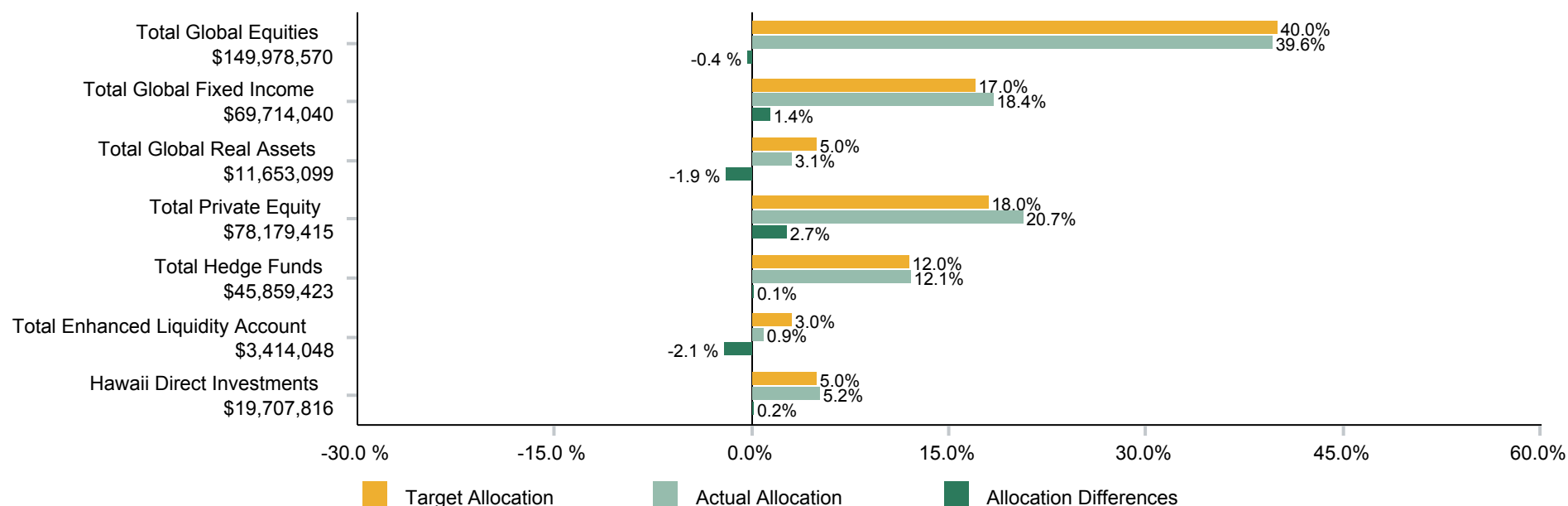
Annual Asset Class Performance

As of September 30, 2018

| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | YTD |
|-------|--------------------|--------------------------|---------------------------|--------------------|--------------------------|---------------------------|-----------------|-----------------------------|----------------------|---------------|------------------------|------------------------------------|-----------------------|-------------------------------|---------------------|
| Best | 31.47 | 34.54 | 35.93 | 39.78 | 5.24 | 79.02 | 29.09 | 13.56 | 18.64 | 43.30 | 30.38 | 5.67 | 31.74 | 37.75 | 17.09 |
| | 25.95 | 14.02 | 32.59 | 11.81 | 1.80 | 58.21 | 28.47 | 8.68 | 18.53 | 38.82 | 13.45 | 2.52 | 21.31 | 30.21 | 15.76 |
| | 22.25 | 12.11 | 26.86 | 11.63 | -2.35 | 37.21 | 26.85 | 8.46 | 18.05 | 34.52 | 13.24 | 1.23 | 17.34 | 25.62 | 11.51 |
| | 20.70 | 10.74 | 23.48 | 11.63 | -10.91 | 34.47 | 24.50 | 7.84 | 17.90 | 33.48 | 13.05 | 0.92 | 17.13 | 22.17 | 10.49 |
| | 18.33 | 7.05 | 22.25 | 7.05 | -20.30 | 32.46 | 19.20 | 4.98 | 17.78 | 33.11 | 5.97 | 0.65 | 12.05 | 21.69 | 7.14 |
| | 16.49 | 6.27 | 18.37 | 6.97 | -26.16 | 28.61 | 16.71 | 2.64 | 17.51 | 32.53 | 5.60 | 0.55 | 11.60 | 14.65 | 3.92 |
| | 14.31 | 5.66 | 15.46 | 6.28 | -28.92 | 28.43 | 16.10 | 1.50 | 16.42 | 23.29 | 5.53 | 0.03 | 11.32 | 13.66 | 2.57 |
| | 11.75 | 5.26 | 13.35 | 5.77 | -33.79 | 28.19 | 15.51 | 0.39 | 16.35 | 7.90 | 4.89 | -0.39 | 10.19 | 9.32 | 2.30 |
| | 11.40 | 4.71 | 11.86 | 4.74 | -36.85 | 27.17 | 15.12 | 0.06 | 15.81 | 7.44 | 4.22 | -1.38 | 8.60 | 7.84 | 1.98 |
| | 11.14 | 4.55 | 9.86 | 1.87 | -37.60 | 24.67 | 13.16 | -2.44 | 15.26 | 2.47 | 3.64 | -1.44 | 7.08 | 7.50 | 1.29 |
| | 8.46 | 4.15 | 9.07 | 1.81 | -37.98 | 20.58 | 12.06 | -2.91 | 14.59 | 0.06 | 3.40 | -3.83 | 6.36 | 5.07 | -0.84 |
| | 8.20 | 3.01 | 8.99 | -0.17 | -38.44 | 19.69 | 8.21 | -4.18 | 8.18 | -2.02 | 2.45 | -4.41 | 4.68 | 4.09 | -0.98 |
| | 6.30 | 2.84 | 4.76 | -1.57 | -38.54 | 11.41 | 6.54 | -5.50 | 6.98 | -2.27 | 0.02 | -4.47 | 2.65 | 3.54 | -1.60 |
| | 4.34 | 2.74 | 4.34 | -9.78 | -43.06 | 5.93 | 6.31 | -11.73 | 4.21 | -6.58 | -1.82 | -7.47 | 1.51 | 3.01 | -3.46 |
| Worst | 1.24 | 2.43 | 0.49 | -16.81 | -53.18 | 0.16 | 0.10 | -18.17 | 0.09 | -8.61 | -4.48 | -14.60 | 0.27 | 0.84 | -7.39 |
| | Russell 1000 Index | Russell 1000 Value Index | Russell 1000 Growth Index | Russell 2000 Index | Russell 2000 Value Index | Russell 2000 Growth Index | MSCI EAFE Index | MSCI Emerging Markets Index | MSCI U.S. REIT Index | Barclays Agg. | Blmbg. Barc. U.S. TIPS | Blmbg. Barc. U.S. Corp. High Yield | JPM EMBI Global (USD) | HFRI RV: Multi-Strategy Index | FTSE 3 Month T-Bill |

Total Traditional Assets





| | Asset Allocation (\$) | Asset Allocation (%) | Target Allocation (%) | Differences (%) | Minimum Allocation (%) | Maximum Allocation (%) |
|----------------------------------|-----------------------|----------------------|-----------------------|-----------------|------------------------|------------------------|
| Total OHA Plan | 378,506,411 | 100.00 | 100.00 | 0.00 | N/A | N/A |
| Total Global Equities | 149,978,570 | 39.62 | 40.00 | -0.38 | 22.00 | 55.00 |
| Total Global Fixed Income | 69,714,040 | 18.42 | 17.00 | 1.42 | 11.00 | 22.00 |
| Total Global Real Assets | 11,653,099 | 3.08 | 5.00 | -1.92 | 0.00 | 11.00 |
| Total Private Equity | 78,179,415 | 20.65 | 18.00 | 2.65 | 0.00 | 25.60 |
| Total Hedge Funds | 45,859,423 | 12.12 | 12.00 | 0.12 | 6.40 | 19.20 |
| Total Enhanced Liquidity Account | 3,414,048 | 0.90 | 3.00 | -2.10 | 0.00 | 10.00 |
| Hawaii Direct Investments | 19,707,816 | 5.21 | 5.00 | 0.21 | 0.00 | 10.00 |

As of September 30, 2018

| | Total Fund | |
|--|--------------------|---------------|
| | (\$) | % |
| Total OHA Plan | 378,506,411 | 100.00 |
| Total Global Equities | 149,978,570 | 39.62 |
| SS Money Market (SALXX) | 1,166 | 0.00 |
| Commonfund Open Cash | 1,518,835 | 0.40 |
| State Street S&P 500 Index Strategy | 35,822,524 | 9.46 |
| JP Morgan US Large Cap Core Plus (JLPSX) | 12,000,453 | 3.17 |
| JP Morgan Intrepid America Fund | 6,740,000 | 1.78 |
| JP Morgan Disciplined Equity R6 (JDEUX) | 6,664,105 | 1.76 |
| JP Morgan Value Advantage Instl (JVAIX) | 7,673,437 | 2.03 |
| JP Morgan Growth Advantage (JGVVX) | 8,449,091 | 2.23 |
| JP Morgan Mid Cap Equity Select (VSNGX) | 3,362,601 | 0.89 |
| JP Morgan US Small Company Instl (JUSSF) | 3,642,795 | 0.96 |
| State Street Global Equity | 22,931,137 | 6.06 |
| Strategic Solutions Global Equity | 10,413,183 | 2.75 |
| JP Morgan Intl Research (OIEAX) | 9,440,267 | 2.49 |
| JP Morgan Intrepid International (JIFFX) | 6,848,375 | 1.81 |
| JP Morgan International Equity R6 (JNEMX) | 6,994,915 | 1.85 |
| JP Morgan Emerging Markets Equity (JMIEX) | 4,041,441 | 1.07 |
| JP Morgan Emerging Economies Select (JEEEX) | 3,434,245 | 0.91 |
| Total Global Fixed Income | 69,714,040 | 18.42 |
| SSGA Funds | 71,144 | 0.02 |
| JPM Open Cash | 319,634 | 0.08 |
| iShares TIPS Bond (TIP) | 2,870,147 | 0.76 |
| JP Morgan Inflation Managed (JRBSX) | 2,901,578 | 0.77 |
| State Street Aggregate Bond IN | 32,115,334 | 8.48 |
| JP Morgan Core Bond (JCBUX) | 6,120,523 | 1.62 |
| JP Morgan Core Plus (HLIPX) | 3,653,547 | 0.97 |
| WAMCO Short Dated High Yield Portfolio | 5,754,383 | 1.52 |
| JP Morgan High Yield R6 (JHYUX) | 7,341,461 | 1.94 |
| JP Morgan Floating Rate Income (JPHSX) | 8,324,340 | 2.20 |
| JP Morgan Emerging Markets Debt (JEMDX) | 117,949 | 0.03 |
| JP Morgan Emerging Mkt Strategic Debt (JEC SX) | 124,001 | 0.03 |

As of September 30, 2018

| | Total Fund | |
|--|-------------------|--------------|
| | (\$) | % |
| Total Global Real Assets | 11,653,099 | 3.08 |
| JPM Realty Income Inst (JPINX) | 4,508,713 | 1.19 |
| State Street Real Asset NL CTF (HWA5) | 2,295,161 | 0.61 |
| SSGA S&P Global Natural Resources Index | 1,502,855 | 0.40 |
| SSGA Tuckerman U.S. REIT Index | 2,378,171 | 0.63 |
| Harvest MLP Income | 968,199 | 0.26 |
| Total Private Equity | 78,179,415 | 20.65 |
| Total Diversified Private Equity | 52,863,029 | 13.97 |
| Total Private Equity Fund of Funds | 40,046,244 | 10.58 |
| Pantheon Europe Fund IV LP | 547,293 | 0.14 |
| Pantheon USA Fund VI LP | 1,501,658 | 0.40 |
| Pantheon Europe Fund VI LP | 2,889,548 | 0.76 |
| Pantheon USA Fund VIII LP | 5,350,854 | 1.41 |
| GS PEP 2004 Offshore | 819,580 | 0.22 |
| GS PEP 2005 Offshore | 440,451 | 0.12 |
| GS PEP Asia Offshore | 327,085 | 0.09 |
| GS PEP IX Offshore | 295,887 | 0.08 |
| GS PEP X Offshore | 1,302,402 | 0.34 |
| Commonfund International Partners VII | 2,393,373 | 0.63 |
| Commonfund Venture Partners X | 7,022,361 | 1.86 |
| Pantheon Emerging Asia Fund VI LP | 2,247,166 | 0.59 |
| Commonfund Private Equity Partners VIII | 1,595,965 | 0.42 |
| GS GEM PEM Off | 2,210,641 | 0.58 |
| Commonfund Emerging Markets Partners 2013 | 4,643,342 | 1.23 |
| Commonfund Private Equity Partners IX | 1,385,625 | 0.37 |
| Commonfund International Partners VIII | 1,304,257 | 0.34 |
| Commonfund Venture Partners XI | 3,768,756 | 1.00 |
| Total Private Equity Multi-Strategy | 12,816,785 | 3.39 |
| Pantheon Global Co-Investment Opps II | 1,042,813 | 0.28 |
| Pantheon Global Secondary Fund II LP | 117,211 | 0.03 |
| GS Vintage V Offshore | 781,419 | 0.21 |
| Pantheon Global Secondary Fund IV LP | 1,118,100 | 0.30 |
| GS Vintage VI Offshore | 2,090,961 | 0.55 |
| GS Vintage VII Offshore | 2,489,138 | 0.66 |

As of September 30, 2018

| | Total Fund | |
|---|-------------------|--------------|
| | (\$) | % |
| Pantheon Global Secondary Fund V | 4,915,637 | 1.30 |
| GS Co-Investment Partners II Offshore | 261,506 | 0.07 |
| Total Private Debt | 7,230,883 | 1.91 |
| GS Mezzanine V | 163,147 | 0.04 |
| Highbridge Offshore Mezzanine Partners II LP | 2,426,053 | 0.64 |
| Highbridge Irish Specialty Loan Fund III | 1,242,209 | 0.33 |
| GS Broad Street Senior Credit Partners | 1,124,999 | 0.30 |
| Highbridge European Asset Value Offshore | 2,274,475 | 0.60 |
| Total Private Real Assets | 18,085,503 | 4.78 |
| Commonfund Natural Resources Partners IX | 9,697,877 | 2.56 |
| JP Morgan Asian I&R Res Opp Fund II | 581,044 | 0.15 |
| GS Broad Street Real Estate Credit Partners II GP, L.L.C. | 404,056 | 0.11 |
| Pantheon Global Infrastructure Fund II | 1,742,569 | 0.46 |
| Commonfund Natural Resources Partners X | 5,659,957 | 1.50 |
| Total Hedge Funds | 45,859,423 | 12.12 |
| Global Absolute Alpha Company | 24,795,163 | 6.55 |
| PIMCO Tactical Opportunities Fund | 21,064,260 | 5.57 |
| Total Enhanced Liquidity Account | 3,414,048 | 0.90 |
| SSGA 1-3 Year U.S. Credit Index (CM2WNON) | 3,414,048 | 0.90 |
| Hawaii Direct Investments | 19,707,816 | 5.21 |
| SSGA Real Asset NL Strategy (HWA4) | 19,707,816 | 5.21 |
| Cash Awaiting Transfer | - | 0.00 |

Native Hawaiian Trust Fund

Comparative Performance

As of September 30, 2018

| | Allocation | | Performance (%) | | | | | | | | | | Expense Ratio |
|--|----------------------|---------------|-----------------|-------------|--------------|----------------------|-------------|--------------|-------------|--------------|-----------------|-------------------|---------------|
| | Market Value (\$000) | % | 1 Month | 1 Quarter | Year To Date | Jul-2018 To Sep-2018 | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date | |
| Total OHA Plan | 378,506 | 100.00 | 0.11 | 1.88 | 3.04 | 1.88 | 6.77 | 8.72 | 6.42 | 8.01 | 6.89 | 03/01/2003 | |
| IPS Total OHA Benchmark | | | 0.17 | 2.81 | 3.17 | 2.81 | 7.17 | 9.19 | 6.78 | 8.48 | 7.61 | | |
| All Endowments-Total Fund Median | | | 0.03 | 2.32 | 3.20 | 2.32 | 7.04 | 9.24 | 6.81 | 8.72 | 7.89 | | |
| Total OHA Plan Rank | | | 38 | 75 | 55 | 75 | 56 | 69 | 62 | 75 | 83 | | |
| Population | | | 332 | 332 | 328 | 332 | 326 | 307 | 284 | 258 | 167 | | |
| Total Global Equities | 149,979 | 39.62 | 0.30 | 4.29 | 3.80 | 4.29 | 9.66 | 13.13 | 8.78 | 12.23 | 8.78 | 03/01/2003 | |
| IPS Global Equities Benchmark | | | 0.44 | 4.28 | 3.83 | 4.28 | 9.72 | 13.50 | 8.71 | 11.79 | 9.33 | | |
| SS Money Market (SALXX) | 1 | 0.00 | 0.13 | 0.40 | 0.88 | 0.40 | 1.09 | N/A | N/A | N/A | 0.79 | 12/01/2016 | 0.37 |
| 90 Day U.S. Treasury Bill | | | 0.15 | 0.49 | 1.30 | 0.49 | 1.59 | 0.80 | 0.50 | 0.37 | 1.20 | | |
| IM U.S. Taxable Money Market (MF) Median | | | 0.14 | 0.41 | 1.04 | 0.41 | 1.23 | 0.53 | 0.33 | 0.23 | 0.87 | | 0.49 |
| SS Money Market (SALXX) Rank | | | 58 | 54 | 71 | 54 | 66 | N/A | N/A | N/A | 58 | | |
| Population | | | 857 | 853 | 846 | 853 | 832 | 719 | 680 | 662 | 817 | | |
| Commonfund Open Cash | 1,519 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A | 0.00 | 07/01/2012 | |
| 90 Day U.S. Treasury Bill | | | 0.15 | 0.49 | 1.30 | 0.49 | 1.59 | 0.80 | 0.50 | 0.37 | 0.41 | | |
| IM U.S. Cash Fixed Income (SA+CF) Median | | | 0.17 | 0.59 | 1.51 | 0.59 | 1.82 | 1.31 | 1.01 | 1.01 | 0.99 | | |
| Commonfund Open Cash Rank | | | 97 | 100 | 100 | 100 | 100 | 100 | 100 | N/A | 100 | | |
| Population | | | 55 | 55 | 53 | 55 | 53 | 53 | 48 | 43 | 45 | | |
| State Street S&P 500 Index Strategy (SSSYX) | 35,823 | 9.46 | 0.55 | 7.66 | 10.55 | 7.66 | 17.80 | N/A | N/A | N/A | 21.34 | 11/01/2016 | 0.02 |
| S&P 500 | | | 0.57 | 7.71 | 10.56 | 7.71 | 17.91 | 17.31 | 13.95 | 16.91 | 20.27 | | |
| IM U.S. Large Cap Core Equity (MF) Median | | | 0.53 | 7.24 | 8.84 | 7.24 | 15.93 | 15.46 | 12.29 | 15.63 | 18.68 | | 0.93 |
| State Street S&P 500 Index Strategy (SSSYX) Rank | | | 49 | 32 | 25 | 32 | 29 | N/A | N/A | N/A | 13 | | |
| Population | | | 779 | 768 | 749 | 768 | 722 | 628 | 570 | 513 | 668 | | |
| JP Morgan US Large Cap Core Plus (JLPSX) | 12,000 | 3.17 | 1.31 | 8.62 | 10.68 | 8.62 | 18.22 | 16.45 | N/A | N/A | 12.27 | 05/01/2014 | 0.85 |
| S&P 500 | | | 0.57 | 7.71 | 10.56 | 7.71 | 17.91 | 17.31 | 13.95 | 16.91 | 12.69 | | |
| IM U.S. Large Cap Core Equity (MF) Median | | | 0.53 | 7.24 | 8.84 | 7.24 | 15.93 | 15.46 | 12.29 | 15.63 | 11.11 | | 0.93 |
| JP Morgan US Large Cap Core Plus (JLPSX) Rank | | | 7 | 10 | 23 | 10 | 24 | 31 | N/A | N/A | 24 | | |
| Population | | | 779 | 768 | 749 | 768 | 722 | 628 | 570 | 513 | 581 | | |
| JP Morgan Intrepid America Fund (JIAPX) | 6,740 | 1.78 | 0.04 | 7.57 | N/A | 7.57 | N/A | N/A | N/A | N/A | 10.29 | 04/01/2018 | 0.34 |
| S&P 500 | | | 0.57 | 7.71 | 10.56 | 7.71 | 17.91 | 17.31 | 13.95 | 16.91 | 11.41 | | |
| IM U.S. Large Cap Core Equity (MF) Median | | | 0.53 | 7.24 | 8.84 | 7.24 | 15.93 | 15.46 | 12.29 | 15.63 | 10.15 | | 0.93 |
| JP Morgan Intrepid America Fund (JIAPX) Rank | | | 89 | 37 | N/A | 37 | N/A | N/A | N/A | N/A | 47 | | |
| Population | | | 779 | 768 | 749 | 768 | 722 | 628 | 570 | 513 | 757 | | |
| JP Morgan Disciplined Equity R6 (JDEUX) | 6,664 | 1.76 | 0.79 | 7.95 | 9.80 | 7.95 | 17.00 | 15.73 | 13.03 | N/A | 14.10 | 05/01/2012 | 0.25 |
| S&P 500 | | | 0.57 | 7.71 | 10.56 | 7.71 | 17.91 | 17.31 | 13.95 | 16.91 | 14.51 | | |
| IM U.S. Large Cap Core Equity (MF) Median | | | 0.53 | 7.24 | 8.84 | 7.24 | 15.93 | 15.46 | 12.29 | 15.63 | 13.25 | | 0.93 |
| JP Morgan Disciplined Equity R6 (JDEUX) Rank | | | 26 | 22 | 38 | 22 | 38 | 44 | 31 | N/A | 25 | | |
| Population | | | 779 | 768 | 749 | 768 | 722 | 628 | 570 | 513 | 539 | | |

Native Hawaiian Trust Fund

Comparative Performance

As of September 30, 2018

| | Allocation | | Performance (%) | | | | | | | | | | Expense Ratio |
|--|----------------------|------|-----------------|-----------|--------------|----------------------|--------|---------|---------|---------|-----------------|----------------|---------------|
| | Market Value (\$000) | % | 1 Month | 1 Quarter | Year To Date | Jul-2018 To Sep-2018 | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date | |
| JP Morgan Value Advantage Instl (JVAIX) | 7,673 | 2.03 | -1.03 | 4.89 | 3.77 | 4.89 | 10.16 | 12.54 | 10.67 | N/A | 12.46 | 05/01/2012 | 0.75 |
| Russell 3000 Value Index | | | 0.00 | 5.39 | 4.17 | 5.39 | 9.46 | 13.75 | 10.65 | 15.04 | 12.58 | | |
| IM U.S. Multi-Cap Value Equity (MF) Median | | | -0.19 | 4.83 | 3.42 | 4.83 | 9.20 | 13.02 | 9.65 | 14.28 | 11.74 | | 0.97 |
| JP Morgan Value Advantage Instl (JVAIX) Rank | | | 86 | 48 | 43 | 48 | 40 | 60 | 24 | N/A | 27 | | |
| Population | | | 423 | 423 | 421 | 423 | 417 | 344 | 290 | 260 | 277 | | |
| JP Morgan Growth Advantage (JGVVX) | 8,449 | 2.23 | -0.20 | 8.57 | 20.24 | 8.57 | 29.00 | 21.11 | 17.04 | N/A | 17.49 | 05/01/2012 | 0.64 |
| Russell 3000 Growth Index | | | 0.33 | 8.88 | 16.99 | 8.88 | 25.89 | 20.36 | 16.23 | 18.60 | 16.08 | | |
| IM U.S. Multi-Cap Growth Equity (MF) Median | | | 0.11 | 7.63 | 14.98 | 7.63 | 22.50 | 17.12 | 13.25 | 16.71 | 14.06 | | 1.14 |
| JP Morgan Growth Advantage (JGVVX) Rank | | | 70 | 31 | 19 | 31 | 16 | 11 | 7 | N/A | 7 | | |
| Population | | | 564 | 564 | 553 | 564 | 550 | 488 | 423 | 363 | 379 | | |
| JP Morgan Mid Cap Equity Select (VSNGX) | 3,363 | 0.89 | -0.93 | 5.81 | 8.91 | 5.81 | 14.56 | 13.68 | 11.88 | N/A | 14.93 | 06/01/2012 | 0.89 |
| Russell Midcap Index | | | -0.64 | 5.00 | 7.46 | 5.00 | 13.98 | 14.52 | 11.65 | 16.09 | 14.89 | | |
| IM U.S. Multi-Cap Growth Equity (MF) Median | | | 0.11 | 7.63 | 14.98 | 7.63 | 22.50 | 17.12 | 13.25 | 16.71 | 15.62 | | 1.14 |
| JP Morgan Mid Cap Equity Select (VSNGX) Rank | | | 95 | 77 | 92 | 77 | 90 | 83 | 71 | N/A | 63 | | |
| Population | | | 564 | 564 | 553 | 564 | 550 | 488 | 423 | 363 | 381 | | |
| JP Morgan US Small Company Instl (JUSSX) | 3,643 | 0.96 | -3.21 | 1.00 | 8.30 | 1.00 | 12.02 | 14.32 | 10.42 | N/A | 15.19 | 06/01/2012 | 0.81 |
| Russell 2000 Index | | | -2.41 | 3.58 | 11.51 | 3.58 | 15.24 | 17.12 | 11.07 | 16.43 | 15.05 | | |
| IM U.S. Small Cap Core Equity (MF) Median | | | -2.67 | 1.87 | 8.31 | 1.87 | 11.37 | 15.36 | 10.12 | 15.28 | 14.28 | | 1.30 |
| JP Morgan US Small Company Instl (JUSSX) Rank | | | 70 | 62 | 51 | 62 | 42 | 60 | 45 | N/A | 36 | | |
| Population | | | 113 | 112 | 111 | 112 | 110 | 100 | 76 | 68 | 72 | | |
| State Street Global Equity (SSGLX) | 22,931 | 6.06 | 0.48 | 0.78 | -2.90 | 0.78 | 1.86 | N/A | N/A | N/A | 12.76 | 11/01/2016 | 0.06 |
| MSCI AC World ex USA | | | 0.50 | 0.80 | -2.67 | 0.80 | 2.25 | 10.49 | 4.60 | 7.74 | 12.18 | | |
| IM International Large Cap Core Equity (MF) Median | | | 0.62 | 0.49 | -2.62 | 0.49 | 1.35 | 8.17 | 3.65 | 8.07 | 11.20 | | 1.03 |
| State Street Global Equity (SSGLX) Rank | | | 58 | 34 | 60 | 34 | 29 | N/A | N/A | N/A | 16 | | |
| Population | | | 85 | 84 | 82 | 84 | 75 | 63 | 55 | 52 | 72 | | |
| Strategic Solutions Global Equity | 10,413 | 2.75 | 0.50 | 4.38 | 3.51 | 4.38 | 8.83 | 12.67 | N/A | N/A | 7.24 | 07/01/2014 | |
| MSCI AC World Index (Net) | | | 0.44 | 4.28 | 3.83 | 4.28 | 9.77 | 13.40 | 8.67 | 11.62 | 6.94 | | |
| IM Global Equity (SA+CF) Median | | | 0.17 | 3.63 | 3.99 | 3.63 | 9.64 | 13.03 | 9.50 | 13.17 | 7.71 | | |
| Strategic Solutions Global Equity Rank | | | 34 | 37 | 55 | 37 | 55 | 57 | N/A | N/A | 56 | | |
| Population | | | 486 | 485 | 484 | 485 | 482 | 450 | 408 | 340 | 428 | | |
| JP Morgan Intl Research (OIEAX) | 9,440 | 2.49 | 1.15 | 0.50 | -2.44 | 0.50 | 0.79 | N/A | N/A | N/A | 0.79 | 10/01/2017 | 0.35 |
| MSCI EAFE (Net) | | | 0.87 | 1.35 | -1.43 | 1.35 | 2.74 | 9.23 | 4.42 | 8.30 | 2.74 | | |
| IM International Large Cap Core Equity (MF) Median | | | 0.62 | 0.49 | -2.62 | 0.49 | 1.35 | 8.17 | 3.65 | 8.07 | 1.35 | | 1.03 |
| JP Morgan Intl Research (OIEAX) Rank | | | 15 | 50 | 47 | 50 | 65 | N/A | N/A | N/A | 65 | | |
| Population | | | 85 | 84 | 82 | 84 | 75 | 63 | 55 | 52 | 75 | | |

Native Hawaiian Trust Fund

Comparative Performance

As of September 30, 2018

| | Allocation | | Performance (%) | | | | | | | | | | Expense Ratio |
|--|----------------------|--------------|-----------------|-------------|--------------|----------------------|--------------|-------------|-------------|-------------|-----------------|-------------------|---------------|
| | Market Value (\$000) | % | 1 Month | 1 Quarter | Year To Date | Jul-2018 To Sep-2018 | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date | |
| JP Morgan Intrepid International (JIFFX) | 6,848 | 1.81 | 0.88 | 1.02 | -3.11 | 1.02 | -0.09 | 7.85 | 4.30 | N/A | 6.82 | 05/01/2012 | 0.55 |
| MSCI EAFE (Net) | | | 0.87 | 1.35 | -1.43 | 1.35 | 2.74 | 9.23 | 4.42 | 8.30 | 7.13 | | |
| IM International Equity (MF) Median | | | -0.16 | -0.27 | -3.92 | -0.27 | 0.07 | 9.15 | 3.98 | 7.71 | 6.03 | | 1.18 |
| JP Morgan Intrepid International (JIFFX) Rank | | | 19 | 25 | 41 | 25 | 52 | 70 | 45 | N/A | 36 | | |
| Population | | | 3,307 | 3,284 | 3,185 | 3,284 | 3,124 | 2,637 | 2,090 | 1,723 | 1,828 | | |
| JP Morgan International Equity R6 (JNEMX) | 6,995 | 1.85 | 0.23 | -0.80 | -5.70 | -0.80 | -0.46 | 9.04 | 3.59 | N/A | 5.90 | 05/01/2012 | 0.50 |
| MSCI EAFE (Net) | | | 0.87 | 1.35 | -1.43 | 1.35 | 2.74 | 9.23 | 4.42 | 8.30 | 7.13 | | |
| IM International Large Cap Core Equity (MF) Median | | | 0.62 | 0.49 | -2.62 | 0.49 | 1.35 | 8.17 | 3.65 | 8.07 | 6.46 | | 1.03 |
| JP Morgan International Equity R6 (JNEMX) Rank | | | 67 | 96 | 89 | 96 | 83 | 20 | 52 | N/A | 66 | | |
| Population | | | 85 | 84 | 82 | 84 | 75 | 63 | 55 | 52 | 52 | | |
| JP Morgan Emerging Markets Equity (JMIEIX) | 4,041 | 1.07 | -1.57 | -3.13 | -10.16 | -3.13 | -3.50 | 13.42 | 4.40 | 5.66 | 1.99 | 07/01/2011 | 0.95 |
| MSCI EM (net) | | | -0.53 | -1.09 | -7.68 | -1.09 | -0.81 | 12.36 | 3.61 | 5.03 | 1.22 | | |
| IM Emerging Markets Equity (MF) Median | | | -0.97 | -2.44 | -9.73 | -2.44 | -3.97 | 10.24 | 2.92 | 4.70 | 0.84 | | 1.34 |
| JP Morgan Emerging Markets Equity (JMIEIX) Rank | | | 67 | 58 | 55 | 58 | 45 | 10 | 18 | 31 | 25 | | |
| Population | | | 895 | 890 | 858 | 890 | 845 | 723 | 515 | 375 | 356 | | |
| JP Morgan Emerging Economies Select (JEESX) | 3,434 | 0.91 | 0.08 | -2.60 | -12.40 | -2.60 | -8.07 | 9.13 | 1.37 | 3.80 | -0.47 | 07/01/2011 | 0.89 |
| MSCI EM (net) | | | -0.53 | -1.09 | -7.68 | -1.09 | -0.81 | 12.36 | 3.61 | 5.03 | 1.22 | | |
| IM Emerging Markets Equity (MF) Median | | | -0.97 | -2.44 | -9.73 | -2.44 | -3.97 | 10.24 | 2.92 | 4.70 | 0.84 | | 1.34 |
| JP Morgan Emerging Economies Select (JEESX) Rank | | | 22 | 51 | 75 | 51 | 85 | 63 | 77 | 74 | 81 | | |
| Population | | | 895 | 890 | 858 | 890 | 845 | 723 | 515 | 375 | 356 | | |
| Total Global Fixed Income | 69,714 | 18.42 | -0.24 | 0.66 | -0.60 | 0.66 | -0.18 | 3.78 | 2.41 | 2.93 | 4.46 | 03/01/2003 | |
| IPS Global Fixed Income Benchmark | | | -0.64 | 0.02 | -1.60 | 0.02 | -1.40 | 4.30 | 3.09 | 3.00 | 4.12 | | |
| SSGA Funds | 71 | 0.02 | 0.14 | 0.39 | 1.00 | 0.39 | 1.19 | 0.52 | N/A | N/A | 0.32 | 11/01/2013 | |
| 90 Day U.S. Treasury Bill | | | 0.15 | 0.49 | 1.30 | 0.49 | 1.59 | 0.80 | 0.50 | 0.37 | 0.50 | | |
| IM U.S. Cash Fixed Income (SA+CF) Median | | | 0.17 | 0.59 | 1.51 | 0.59 | 1.82 | 1.31 | 1.01 | 1.01 | 1.02 | | |
| SSGA Funds Rank | | | 82 | 97 | 99 | 97 | 97 | 100 | N/A | N/A | 100 | | |
| Population | | | 55 | 55 | 53 | 55 | 53 | 53 | 48 | 43 | 48 | | |
| JPM Open Cash | 320 | 0.08 | 0.00 | 0.00 | 0.03 | 0.00 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 | 07/01/2011 | |
| 90 Day U.S. Treasury Bill | | | 0.15 | 0.49 | 1.30 | 0.49 | 1.59 | 0.80 | 0.50 | 0.37 | 0.36 | | |
| IM U.S. Cash Fixed Income (SA+CF) Median | | | 0.17 | 0.59 | 1.51 | 0.59 | 1.82 | 1.31 | 1.01 | 1.01 | 0.96 | | |
| JPM Open Cash Rank | | | 97 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | |
| Population | | | 55 | 55 | 53 | 55 | 53 | 53 | 48 | 43 | 43 | | |
| iShares TIPS Bond (TIP) | 2,870 | 0.76 | -0.97 | -0.88 | -0.93 | -0.88 | N/A | N/A | N/A | N/A | 0.08 | 11/01/2017 | 0.20 |
| Blmbg. Barc. U.S. TIPS | | | -1.05 | -0.82 | -0.84 | -0.82 | 0.41 | 2.04 | 1.37 | 1.33 | 0.19 | | |
| IM U.S. TIPS (MF) Median | | | -0.85 | -0.72 | -0.89 | -0.72 | 0.29 | 1.82 | 0.72 | 0.88 | 0.07 | | 0.73 |
| iShares TIPS Bond (TIP) Rank | | | 64 | 72 | 56 | 72 | N/A | N/A | N/A | N/A | 50 | | |
| Population | | | 252 | 252 | 243 | 252 | 243 | 211 | 167 | 143 | 243 | | |

Native Hawaiian Trust Fund

Comparative Performance

As of September 30, 2018

| | Allocation | | Performance (%) | | | | | | | | | | Expense Ratio |
|---|----------------------|------|-----------------|-----------|--------------|----------------------|--------|---------|---------|---------|-----------------|----------------|---------------|
| | Market Value (\$000) | % | 1 Month | 1 Quarter | Year To Date | Jul-2018 To Sep-2018 | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date | |
| JP Morgan Inflation Managed (JRBSX) | 2,902 | 0.77 | -0.32 | 0.27 | 0.03 | 0.27 | N/A | N/A | N/A | N/A | 0.34 | 11/01/2017 | 0.60 |
| Blmbg. Barc. U.S. TIPS 1-10 Year | | | -0.70 | -0.42 | -0.20 | -0.42 | 0.33 | 1.65 | 0.94 | 0.98 | 0.16 | | |
| IM U.S. TIPS (MF) Median | | | -0.85 | -0.72 | -0.89 | -0.72 | 0.29 | 1.82 | 0.72 | 0.88 | 0.07 | | 0.73 |
| JP Morgan Inflation Managed (JRBSX) Rank | | | 26 | 11 | 28 | 11 | N/A | N/A | N/A | N/A | 32 | | |
| Population | | | 252 | 252 | 243 | 252 | 243 | 211 | 167 | 143 | 243 | | |
| State Street Aggregate Bond Index (SSFEX) | 32,115 | 8.48 | -0.71 | -0.04 | -1.71 | -0.04 | -1.43 | N/A | N/A | N/A | -0.57 | 11/01/2016 | 0.03 |
| Blmbg. Barc. U.S. Aggregate | | | -0.64 | 0.02 | -1.60 | 0.02 | -1.22 | 1.31 | 2.16 | 2.02 | -0.20 | | |
| IM U.S. Broad Market Core Fixed Income (MF) Median | | | -0.56 | 0.10 | -1.67 | 0.10 | -1.35 | 1.34 | 2.06 | 2.16 | -0.13 | | 0.71 |
| State Street Aggregate Bond Index (SSFEX) Rank | | | 88 | 72 | 57 | 72 | 58 | N/A | N/A | N/A | 77 | | |
| Population | | | 548 | 545 | 530 | 545 | 522 | 461 | 400 | 359 | 486 | | |
| JP Morgan Core Bond (JCBUX) | 6,121 | 1.62 | -0.64 | 0.03 | -1.32 | 0.03 | N/A | N/A | N/A | N/A | -0.96 | 11/01/2017 | 0.35 |
| Blmbg. Barc. U.S. Aggregate | | | -0.64 | 0.02 | -1.60 | 0.02 | -1.22 | 1.31 | 2.16 | 2.02 | -1.27 | | |
| IM U.S. Broad Market Core Fixed Income (MF) Median | | | -0.56 | 0.10 | -1.67 | 0.10 | -1.35 | 1.34 | 2.06 | 2.16 | -1.39 | | 0.71 |
| JP Morgan Core Bond (JCBUX) Rank | | | 75 | 62 | 24 | 62 | N/A | N/A | N/A | N/A | 22 | | |
| Population | | | 548 | 545 | 530 | 545 | 522 | 461 | 400 | 359 | 522 | | |
| JP Morgan Core Plus (HLIPX) | 3,654 | 0.97 | -0.60 | 0.15 | -1.21 | 0.15 | N/A | N/A | N/A | N/A | -0.98 | 11/01/2017 | 0.46 |
| Blmbg. Barc. U.S. Aggregate | | | -0.64 | 0.02 | -1.60 | 0.02 | -1.22 | 1.31 | 2.16 | 2.02 | -1.27 | | |
| IM U.S. Broad Market Core+ Fixed Income (MF) Median | | | -0.43 | 0.26 | -1.52 | 0.26 | -1.24 | 2.15 | 2.42 | 2.90 | -1.32 | | 0.80 |
| JP Morgan Core Plus (HLIPX) Rank | | | 77 | 59 | 31 | 59 | N/A | N/A | N/A | N/A | 35 | | |
| Population | | | 312 | 308 | 285 | 308 | 274 | 219 | 197 | 169 | 278 | | |
| WAMCO Short Dated High Yield Portfolio | 5,754 | 1.52 | 0.48 | 2.57 | 3.63 | 2.57 | 3.75 | 4.24 | N/A | N/A | 1.36 | 12/01/2013 | |
| Blmbg. Barc. U.S. High Yield Ba/B 2% Issuer Cap | | | 0.43 | 2.30 | 1.79 | 2.30 | 2.20 | 7.12 | 5.25 | 7.12 | 4.82 | | |
| IM U.S. High Yield Bonds (SA+CF) Median | | | 0.52 | 2.26 | 2.46 | 2.26 | 3.14 | 7.33 | 5.40 | 7.52 | 4.98 | | |
| WAMCO Short Dated High Yield Portfolio Rank | | | 62 | 19 | 17 | 19 | 31 | 94 | N/A | N/A | 99 | | |
| Population | | | 176 | 176 | 175 | 176 | 175 | 164 | 152 | 132 | 153 | | |
| JP Morgan High Yield R6 (JHYUX) | 7,341 | 1.94 | 0.61 | 2.30 | 2.38 | 2.30 | 2.75 | 6.89 | 4.77 | N/A | 5.56 | 05/01/2012 | 0.60 |
| Blmbg. Barc. U.S. High Yield - 2% Issuer Cap | | | 0.56 | 2.40 | 2.57 | 2.40 | 3.05 | 8.15 | 5.55 | 7.65 | 6.28 | | |
| IM U.S. High Yield Bonds (MF) Median | | | 0.48 | 2.11 | 1.82 | 2.11 | 2.27 | 6.46 | 4.30 | 6.53 | 5.18 | | 1.00 |
| JP Morgan High Yield R6 (JHYUX) Rank | | | 25 | 32 | 28 | 32 | 34 | 37 | 30 | N/A | 30 | | |
| Population | | | 704 | 699 | 684 | 699 | 667 | 569 | 475 | 381 | 414 | | |
| JP Morgan Floating Rate Income (JPHSX) | 8,324 | 2.20 | 0.69 | 1.77 | 3.31 | 1.77 | 3.48 | N/A | N/A | N/A | 3.48 | 10/01/2017 | 0.75 |
| Credit Suisse Leveraged Loan Index | | | 0.68 | 1.93 | 4.36 | 1.93 | 5.58 | 5.43 | 4.35 | 5.45 | 5.58 | | |
| IM U.S. Bank Loans (MF) Median | | | 0.59 | 1.68 | 3.30 | 1.68 | 4.38 | 4.64 | 3.46 | 4.54 | 4.38 | | 1.08 |
| JP Morgan Floating Rate Income (JPHSX) Rank | | | 12 | 36 | 50 | 36 | 90 | N/A | N/A | N/A | 90 | | |
| Population | | | 248 | 247 | 241 | 247 | 233 | 208 | 180 | 142 | 233 | | |

Native Hawaiian Trust Fund

Comparative Performance

As of September 30, 2018

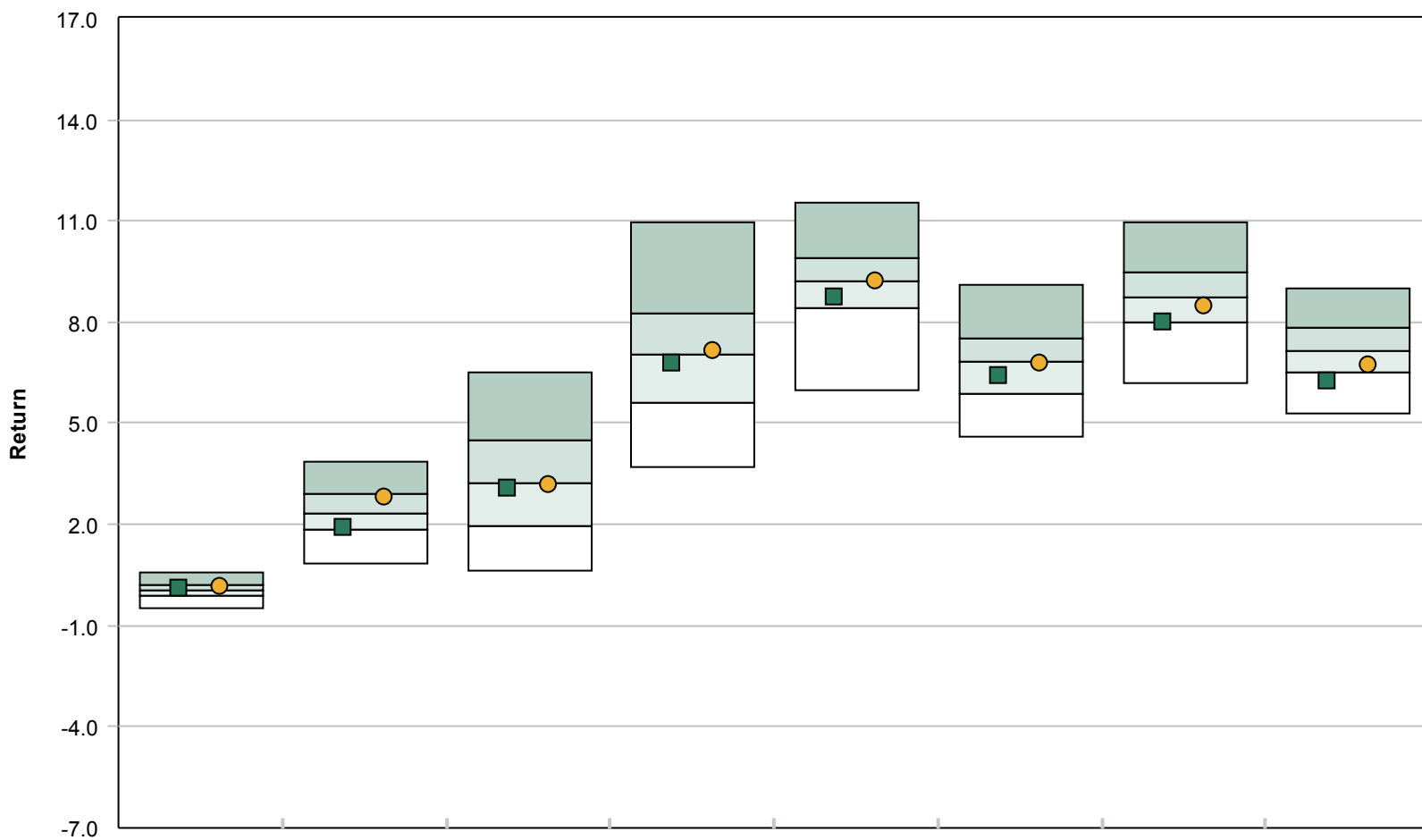
| | Allocation | | Performance (%) | | | | | | | | | | Expense Ratio |
|--|----------------------|-------------|-----------------|--------------|--------------|----------------------|-------------|-------------|-------------|-------------|-----------------|-------------------|---------------|
| | Market Value (\$000) | % | 1 Month | 1 Quarter | Year To Date | Jul-2018 To Sep-2018 | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date | |
| JP Morgan Emerging Markets Debt (JEMDX) | 118 | 0.03 | 1.58 | 1.99 | -3.82 | 1.99 | -2.78 | 5.28 | 3.71 | 4.87 | 4.26 | 07/01/2011 | 0.95 |
| JPM EMBI Global Diversified | | | 1.51 | 2.30 | -3.04 | 2.30 | -1.92 | 6.04 | 5.38 | 5.87 | 5.35 | | |
| IM Emerging Markets Debt (MF) Median | | | 1.75 | 1.26 | -4.77 | 1.26 | -4.05 | 5.34 | 3.24 | 4.63 | 3.81 | | 1.08 |
| JP Morgan Emerging Markets Debt (JEMDX) Rank | | | 57 | 12 | 27 | 12 | 27 | 53 | 38 | 43 | 28 | | |
| Population | | | 291 | 289 | 285 | 289 | 278 | 227 | 169 | 96 | 92 | | |
| JP Morgan Emerging Mkt Strategic Debt (JECSX) | 124 | 0.03 | 1.25 | 1.79 | -3.69 | 1.79 | -2.74 | 5.02 | -2.24 | N/A | -3.44 | 01/01/2013 | 0.95 |
| JPM GBI-EM Global Diversified | | | 2.59 | -1.83 | -8.15 | -1.83 | -7.40 | 5.17 | -1.68 | -0.05 | -2.80 | | |
| IM Emerging Markets Debt (MF) Median | | | 1.75 | 1.26 | -4.77 | 1.26 | -4.05 | 5.34 | 3.24 | 4.63 | 1.57 | | 1.08 |
| JP Morgan Emerging Mkt Strategic Debt (JECSX) Rank | | | 82 | 19 | 25 | 19 | 26 | 62 | 95 | N/A | 94 | | |
| Population | | | 291 | 289 | 285 | 289 | 278 | 227 | 169 | 96 | 139 | | |
| Total Global Real Assets | 11,653 | 3.08 | -1.32 | -0.07 | 1.61 | -0.07 | 4.68 | 6.20 | 5.72 | 9.38 | 8.09 | 11/01/2003 | |
| IPS Real Asset Benchmark | | | -2.06 | -0.30 | 0.06 | -0.30 | 3.66 | 6.19 | 5.43 | 9.28 | 7.72 | | |
| JPM Realty Income Inst (JPINX) | 4,509 | 1.19 | -2.73 | 0.23 | 0.34 | 0.23 | 2.43 | 3.67 | 7.45 | 8.63 | 7.74 | 07/01/2011 | 0.68 |
| Wilshire US REIT Index | | | -2.75 | 0.72 | 2.25 | 0.72 | 3.99 | 7.08 | 9.25 | 11.70 | 8.87 | | |
| IM Real Estate Sector (MF) Median | | | -2.46 | 0.64 | 1.04 | 0.64 | 3.29 | 6.68 | 8.44 | 10.84 | 7.98 | | 1.14 |
| JPM Realty Income Inst (JPINX) Rank | | | 78 | 79 | 69 | 79 | 69 | 100 | 82 | 98 | 60 | | |
| Population | | | 269 | 265 | 256 | 265 | 250 | 219 | 192 | 171 | 165 | | |
| State Street Real Asset NL CTF | 2,295 | 0.61 | 0.46 | -0.63 | 0.07 | -0.63 | 3.84 | N/A | N/A | N/A | 5.83 | 12/01/2016 | |
| FTSE EPRA/NAREIT Developed Index (Net) | | | -2.06 | -0.30 | 0.06 | -0.30 | 3.66 | 6.19 | 5.43 | 9.28 | 7.22 | | |
| Global Real Assets (MF) Median | | | 0.18 | 0.21 | -0.15 | 0.21 | 2.77 | 5.64 | -2.75 | 0.83 | 2.43 | | |
| State Street Real Asset NL CTF Rank | | | 48 | 60 | 49 | 60 | 45 | N/A | N/A | N/A | 36 | | |
| Population | | | 730 | 720 | 680 | 720 | 669 | 584 | 485 | 379 | 629 | | |
| SSGA S&P Global Natural Resources Index | 1,503 | 0.40 | 3.75 | 1.12 | 3.89 | 1.12 | 11.82 | 16.54 | 1.69 | N/A | 4.12 | 01/01/2013 | |
| S&P Global Natural Resources Sector Index | | | 3.61 | 1.32 | 5.07 | 1.32 | 14.09 | 19.69 | 4.12 | 4.63 | 3.05 | | |
| IM Global Natural Resources (MF) Median | | | 1.87 | 0.07 | 0.55 | 0.07 | 8.03 | 9.19 | -2.24 | 1.24 | -0.23 | | |
| SSGA S&P Global Natural Resources Index Rank | | | 7 | 34 | 20 | 34 | 20 | 6 | 22 | N/A | 21 | | |
| Population | | | 115 | 115 | 113 | 115 | 113 | 106 | 99 | 90 | 98 | | |
| SSGA Tuckerman U.S. REIT Index | 2,378 | 0.63 | -2.72 | 0.73 | 2.52 | 0.73 | 4.54 | 6.49 | 8.69 | N/A | 7.89 | 01/01/2013 | |
| FTSE NAREIT All REITs Index | | | -2.36 | 0.69 | 1.80 | 0.69 | 4.22 | 9.21 | 9.66 | 12.22 | 8.89 | | |
| IM U.S. REIT (SA+CF) Median | | | -2.34 | 0.81 | 2.41 | 0.81 | 4.64 | 8.00 | 9.70 | 12.25 | 8.92 | | |
| SSGA Tuckerman U.S. REIT Index Rank | | | 85 | 62 | 41 | 62 | 60 | 92 | 92 | N/A | 93 | | |
| Population | | | 53 | 53 | 53 | 53 | 52 | 52 | 50 | 47 | 49 | | |
| Harvest MLP Income | 968 | 0.26 | -2.10 | 3.65 | N/A | 3.65 | N/A | N/A | N/A | N/A | 11.56 | 03/01/2018 | |
| Alerian MLP Index | | | -1.57 | 6.57 | 5.90 | 6.57 | 4.89 | 4.43 | -2.72 | 3.67 | 10.88 | | |

Native Hawaiian Trust Fund

Comparative Performance

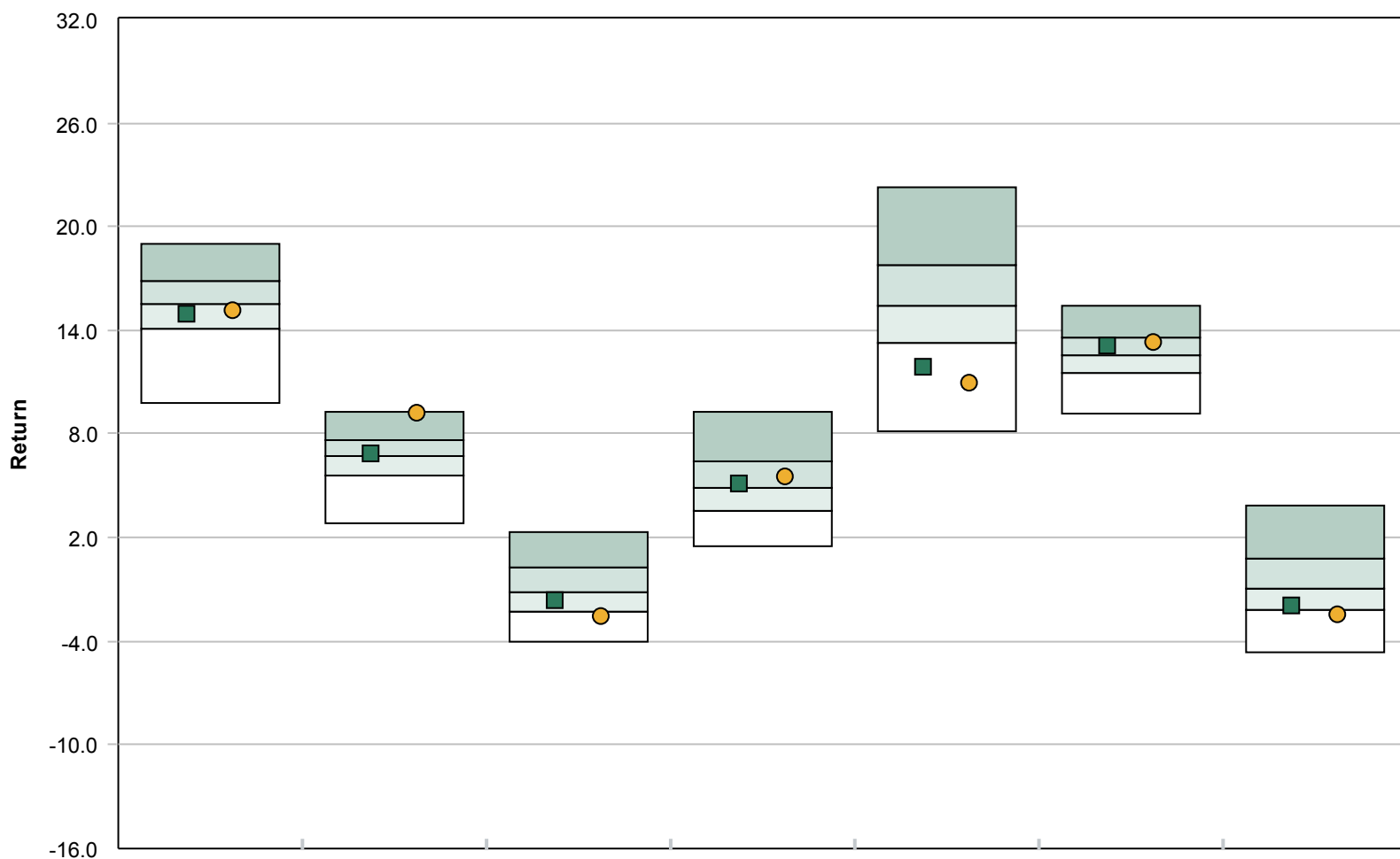
As of September 30, 2018

| | Allocation | | Performance (%) | | | | | | | | | | Expense Ratio |
|--|----------------------|--------------|-----------------|--------------|--------------|----------------------|-------------|-------------|-------------|-------------|-----------------|-------------------|---------------|
| | Market Value (\$000) | % | 1 Month | 1 Quarter | Year To Date | Jul-2018 To Sep-2018 | 1 Year | 3 Years | 5 Years | 7 Years | Since Inception | Inception Date | |
| Total Hedge Funds | 45,859 | 12.12 | 0.51 | 1.09 | 4.35 | 1.09 | 4.70 | 2.48 | 2.90 | 3.15 | 3.82 | 05/01/2017 | |
| IPS Hedge Fund Benchmark | | | 0.48 | 1.48 | 4.33 | 1.48 | 5.66 | 4.84 | 4.52 | 5.68 | 5.46 | | |
| Global Absolute Alpha Company | 24,795 | 6.55 | 0.73 | 1.28 | 2.95 | 1.28 | 3.29 | 1.89 | 2.14 | 3.58 | 2.52 | 08/01/2011 | |
| 90 Day T-Bills +4% | | | 0.48 | 1.48 | 4.33 | 1.48 | 5.66 | 4.87 | 4.54 | 4.41 | 4.40 | | |
| Fund of Funds Hedge Funds Median | | | 0.07 | -0.56 | -2.92 | -0.56 | -0.97 | 2.43 | 0.07 | 1.29 | N/A | | |
| Global Absolute Alpha Company Rank | | | 25 | 14 | 13 | 14 | 18 | 59 | 29 | 25 | N/A | | |
| Population | | | 965 | 959 | 944 | 959 | 936 | 847 | 781 | 703 | N/A | | |
| PIMCO Tactical Opportunities Fund | 21,064 | 5.57 | 0.26 | 0.87 | N/A | 0.87 | N/A | N/A | N/A | N/A | 5.20 | 02/01/2018 | |
| Bmbg. Barc. U.S. Aggregate | | | -0.64 | 0.02 | -1.60 | 0.02 | -1.22 | 1.31 | 2.16 | 2.02 | -0.45 | | |
| Multi-Strategy Hedge Funds-[TASS] Median | | | 3.45 | -1.91 | -12.57 | -1.91 | -15.31 | 10.35 | -0.82 | -0.49 | N/A | | |
| PIMCO Tactical Opportunities Fund Rank | | | 84 | 20 | N/A | 20 | N/A | N/A | N/A | N/A | N/A | | |
| Population | | | 661 | 661 | 652 | 661 | 644 | 622 | 589 | 501 | N/A | | |
| Total Enhanced Liquidity Account | 3,414 | 0.90 | 0.04 | 0.63 | 0.75 | 0.63 | 0.65 | 0.84 | 1.70 | 3.50 | 4.04 | 07/01/2010 | |
| IPS Enhanced Liquidity Account Benchmark | | | -0.12 | 0.19 | 0.24 | 0.19 | -0.04 | 0.88 | 1.96 | 3.33 | 3.47 | | |
| SSGA 1-3 Year U.S. Credit Index (CM2WNON) | 3,414 | 0.90 | 0.04 | 0.63 | 0.75 | 0.63 | 0.65 | N/A | N/A | N/A | 0.97 | 02/01/2017 | |
| Bmbg. Barc. 1-3 Year Credit | | | 0.03 | 0.62 | 0.73 | 0.62 | 0.66 | 1.43 | 1.39 | 1.71 | 1.27 | | |
| IM U.S. Short Duration Fixed Income (SA+CF) Median | | | 0.00 | 0.48 | 0.69 | 0.48 | 0.69 | 1.17 | 1.29 | 1.39 | 1.21 | | |
| SSGA 1-3 Year U.S. Credit Index (CM2WNON) Rank | | | 32 | 17 | 43 | 17 | 52 | N/A | N/A | N/A | 71 | | |
| Population | | | 118 | 118 | 118 | 118 | 118 | 114 | 109 | 104 | 117 | | |
| Hawaii Direct Investments | 19,708 | 5.21 | 0.46 | -0.63 | 0.07 | -0.63 | 3.84 | 6.74 | 1.08 | 1.86 | 2.14 | 07/01/2010 | |
| IPS Hawaii Direct Investment Benchmark | | | -0.81 | -0.08 | 1.38 | -0.08 | 3.42 | 6.75 | 1.13 | 2.07 | 1.64 | | |
| SSGA Real Asset NL Strategy | 19,708 | 5.21 | 0.46 | -0.63 | 0.07 | -0.63 | 3.84 | 6.87 | 1.26 | N/A | 0.74 | 06/01/2013 | |
| FTSE EPRA/NAREIT Developed Index (Net) | | | -2.06 | -0.30 | 0.06 | -0.30 | 3.66 | 6.19 | 5.43 | 9.28 | 4.98 | | |
| Global Real Assets (MF) Median | | | 0.18 | 0.21 | -0.15 | 0.21 | 2.77 | 5.64 | -2.75 | 0.83 | -2.41 | | |
| SSGA Real Asset NL Strategy Rank | | | 48 | 60 | 49 | 60 | 45 | 42 | 28 | N/A | 32 | | |
| Population | | | 730 | 720 | 680 | 720 | 669 | 584 | 485 | 379 | 463 | | |



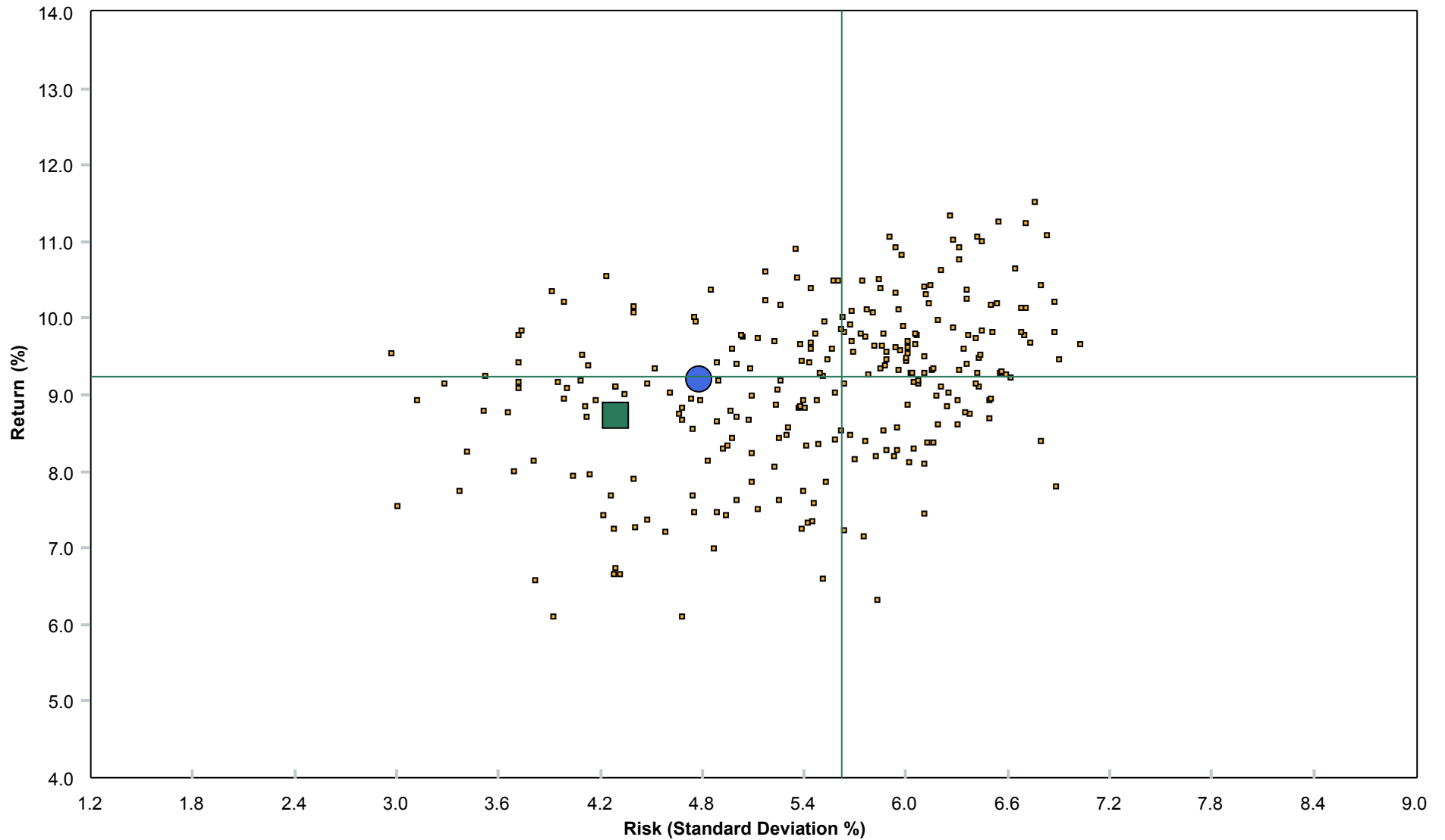
| | 1 Month | 1 Qtr | YTD | 1 Yr | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs |
|---------------------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ■ Total OHA Plan | 0.11 (38) | 1.88 (75) | 3.04 (55) | 6.77 (56) | 8.72 (69) | 6.42 (62) | 8.01 (75) | 6.26 (82) |
| ● IPS Total OHA Benchmark | 0.17 (30) | 2.81 (28) | 3.17 (51) | 7.17 (46) | 9.19 (51) | 6.78 (51) | 8.48 (61) | 6.72 (67) |
| 5th Percentile | 0.60 | 3.88 | 6.49 | 10.98 | 11.56 | 9.09 | 10.94 | 9.00 |
| 1st Quartile | 0.21 | 2.91 | 4.51 | 8.25 | 9.88 | 7.52 | 9.48 | 7.83 |
| Median | 0.03 | 2.32 | 3.20 | 7.04 | 9.24 | 6.81 | 8.72 | 7.17 |
| 3rd Quartile | -0.12 | 1.87 | 1.96 | 5.58 | 8.40 | 5.85 | 7.99 | 6.50 |
| 95th Percentile | -0.47 | 0.85 | 0.64 | 3.68 | 6.01 | 4.60 | 6.19 | 5.28 |

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.



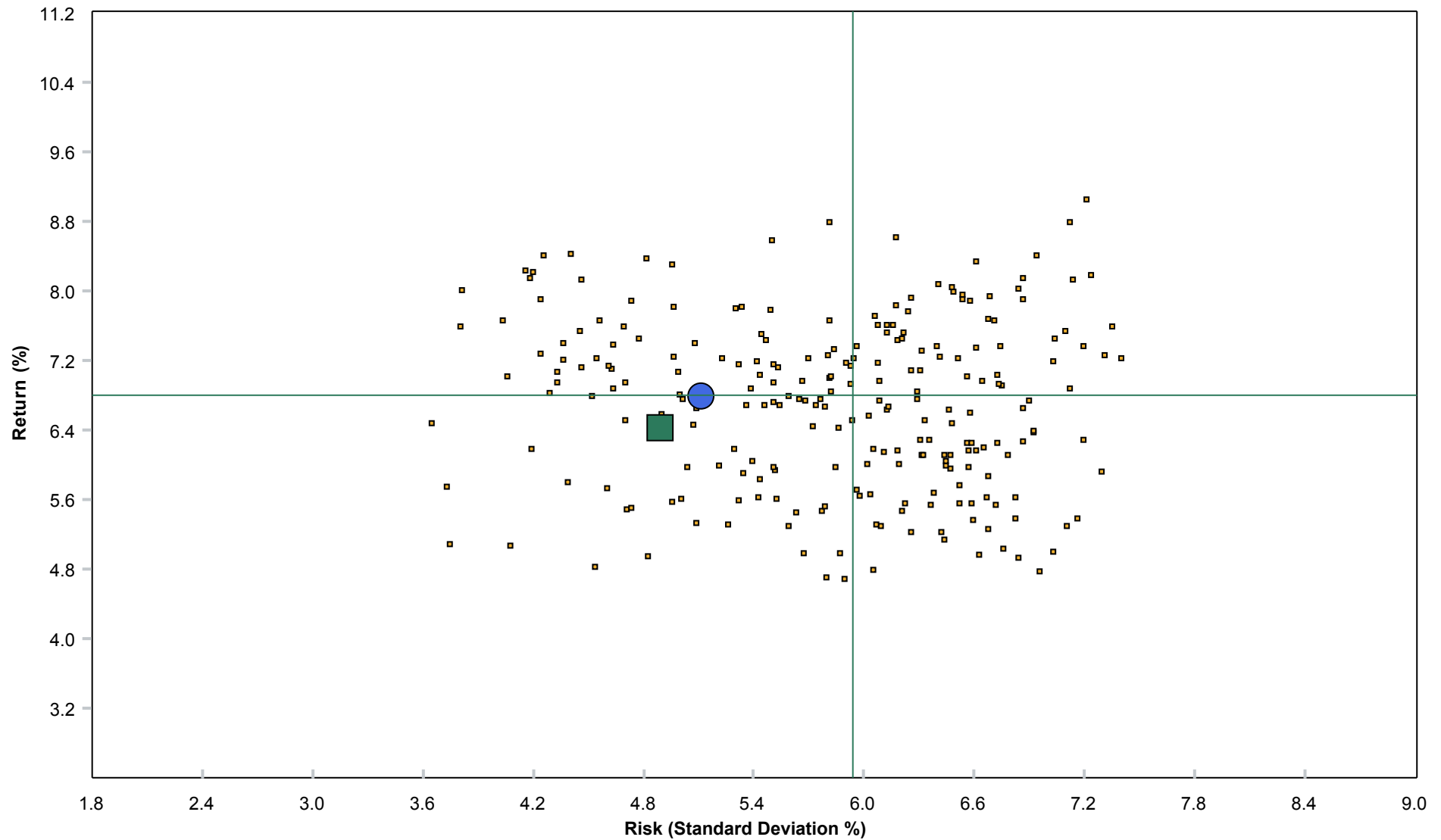
| | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
|---------------------------|------------|-----------|------------|-----------|------------|------------|------------|
| ■ Total OHA Plan | 14.94 (64) | 6.82 (46) | -1.66 (60) | 5.07 (48) | 11.81 (88) | 13.08 (35) | -2.00 (73) |
| ● IPS Total OHA Benchmark | 15.16 (59) | 9.17 (7) | -2.62 (80) | 5.46 (44) | 10.92 (91) | 13.29 (32) | -2.54 (79) |
| 5th Percentile | 19.04 | 9.29 | 2.33 | 9.24 | 22.26 | 15.47 | 3.90 |
| 1st Quartile | 16.87 | 7.59 | 0.23 | 6.37 | 17.82 | 13.53 | 0.73 |
| Median | 15.55 | 6.72 | -1.15 | 4.91 | 15.47 | 12.58 | -0.93 |
| 3rd Quartile | 14.09 | 5.59 | -2.32 | 3.56 | 13.30 | 11.50 | -2.21 |
| 95th Percentile | 9.84 | 2.83 | -4.01 | 1.52 | 8.18 | 9.14 | -4.62 |

Parentheses contain percentile rankings.
Calculation based on monthly periodicity.



| | Return | Standard Deviation |
|---------------------------|--------|--------------------|
| ■ Total OHA Plan | 8.72 | 4.29 |
| ● IPS Total OHA Benchmark | 9.19 | 4.78 |
| — Median | 9.24 | 5.62 |

Calculation based on monthly periodicity.



| | Return | Standard Deviation |
|---------------------------|--------|--------------------|
| ■ Total OHA Plan | 6.42 | 4.90 |
| ● IPS Total OHA Benchmark | 6.78 | 5.12 |
| — Median | 6.81 | 5.94 |

Calculation based on monthly periodicity.

Private Equity Composite

September 30, 2018

| Partnerships | Investment Type | Vintage Year | Investment Strategy | Capital Committed (\$000) | Total Contribution (\$000) | Total Distribution (\$000) | Market Value (\$000) | IRR (%) | TVPI Multiple | DPI Multiple | PIC Multiple | PME+ |
|---|-------------------|--------------|------------------------------|---------------------------|----------------------------|----------------------------|----------------------|-------------|---------------|--------------|--------------|--------------|
| Pantheon Europe Fund IV LP | Fund Of Funds | 2004 | International Private Equity | 5,172 | 4,836 | 5,752 | 547 | 4.72 | 1.30 | 1.19 | 0.94 | 8.14 |
| Pantheon Global Secondary Fund II LP | Secondary | 2004 | Secondaries | 5,000 | 4,750 | 5,595 | 117 | 4.40 | 1.20 | 1.18 | 0.95 | 6.14 |
| Pantheon USA Fund VI LP | Fund Of Funds | 2004 | Hybrid | 6,000 | 5,708 | 7,520 | 1,502 | 7.23 | 1.58 | 1.32 | 0.95 | 7.69 |
| GS PEP 2004 Offshore | Fund Of Funds | 2004 | Buyouts | 9,900 | 11,059 | 14,912 | 820 | 6.86 | 1.42 | 1.35 | 1.12 | 6.97 |
| GS PEP 2005 Offshore | Fund Of Funds | 2005 | Hybrid | 2,000 | 2,169 | 2,159 | 440 | 3.21 | 1.20 | 1.00 | 1.09 | 8.82 |
| Pantheon Europe Fund VI LP | Fund Of Funds | 2007 | International Private Equity | 6,481 | 5,698 | 5,809 | 2,890 | 9.09 | 1.53 | 1.02 | 0.88 | 14.33 |
| Pantheon USA Fund VIII LP | Fund Of Funds | 2007 | Other | 7,500 | 6,698 | 6,746 | 5,351 | 12.07 | 1.81 | 1.01 | 0.89 | 13.78 |
| GS PEP Asia Offshore | Fund Of Funds | 2007 | Buyouts | 1,000 | 892 | 1,053 | 327 | 9.95 | 1.55 | 1.18 | 0.89 | 12.89 |
| GS PEP IX Offshore | Fund Of Funds | 2007 | Buyouts | 1,000 | 1,036 | 1,289 | 296 | 9.16 | 1.53 | 1.25 | 1.04 | 12.59 |
| GS Mezzanine V | Partnership | 2007 | Other | 8,500 | 7,768 | 9,993 | 163 | 10.00 | 1.31 | 1.29 | 0.91 | 7.20 |
| GS PEP X Offshore | Fund Of Funds | 2008 | Buyouts | 3,000 | 2,916 | 3,404 | 1,302 | 11.73 | 1.61 | 1.17 | 0.97 | 14.30 |
| GS Vintage V Offshore | Secondary | 2008 | Secondaries | 4,500 | 3,959 | 5,666 | 781 | 13.18 | 1.63 | 1.43 | 0.88 | 14.69 |
| Pantheon Global Secondary Fund IV LP | Secondary | 2010 | Secondaries | 5,000 | 3,320 | 4,080 | 1,118 | 13.84 | 1.57 | 1.23 | 0.66 | 15.16 |
| Commonfund International Partners VII | Fund Of Funds | 2011 | Buyouts | 3,000 | 2,568 | 1,027 | 2,393 | 8.28 | 1.33 | 0.40 | 0.86 | 14.69 |
| Commonfund Natural Resources Partners IX | Fund Of Funds | 2011 | Energy & Natural Resources | 10,000 | 8,480 | 1,197 | 9,698 | 9.27 | 1.29 | 0.14 | 0.85 | 14.18 |
| Commonfund Venture Partners X | Fund Of Funds | 2012 | Venture Capital | 5,000 | 4,525 | 850 | 7,022 | 17.55 | 1.74 | 0.19 | 0.91 | 13.68 |
| Pantheon Emerging Asia Fund VI LP | Fund Of Funds | 2012 | International Private Equity | 2,000 | 1,628 | 40 | 2,247 | 11.47 | 1.41 | 0.03 | 0.81 | 14.56 |
| Pantheon Global Co-Investment Opps II | Co-Investment | 2012 | International Private Equity | 1,000 | 923 | 553 | 1,043 | 15.78 | 1.73 | 0.60 | 0.92 | 13.66 |
| Highbridge Offshore Mezzanine Partners II LP | Direct | 2012 | Mezzanine | 5,000 | 4,705 | 4,817 | 2,426 | 18.44 | 1.60 | 1.06 | 0.91 | 12.64 |
| Commonfund Private Equity Partners VIII | Fund Of Funds | 2012 | Buyouts | 2,000 | 1,490 | 672 | 1,596 | 14.94 | 1.52 | 0.45 | 0.75 | 13.66 |
| GS Vintage VI Offshore | Secondary | 2012 | Secondaries | 5,000 | 4,320 | 3,533 | 2,091 | 12.33 | 1.30 | 0.82 | 0.86 | 13.46 |
| GS GEM PEM Off | Fund Of Funds | 2012 | Buyouts | 2,500 | 2,516 | 616 | 2,211 | 4.21 | 1.12 | 0.25 | 1.01 | 13.70 |
| Commonfund Emerging Markets Partners 2013 | Fund Of Funds | 2013 | International Private Equity | 5,000 | 3,713 | 481 | 4,643 | 13.57 | 1.38 | 0.13 | 0.74 | 14.24 |
| Highbridge Irish Specialty Loan Fund III | Direct | 2013 | Other | 3,000 | 3,650 | 3,052 | 1,242 | 6.37 | 1.18 | 0.84 | 1.22 | 11.68 |
| Pantheon Global Infrastructure Fund II | Secondary | 2013 | Infrastructure | 2,000 | 1,554 | 290 | 1,743 | 14.35 | 1.31 | 0.19 | 0.78 | 15.19 |
| JP Morgan Asian I&R Res Opp Fund II | Other | 2013 | Infrastructure | 930 | 996 | 64 | 581 | -11.93 | 0.64 | 0.06 | 1.07 | 11.85 |
| GS Broad Street Real Estate Credit Partners II GP, L.L.C. | Partnership | 2013 | Real Estate | 3,000 | 3,344 | 3,416 | 404 | 10.35 | 1.14 | 1.02 | 1.12 | 10.54 |
| Pantheon Global Secondary Fund V | Secondary | 2014 | Secondaries | 7,000 | 3,572 | 833 | 4,916 | 26.14 | 1.61 | 0.23 | 0.51 | 14.22 |
| Commonfund Private Equity Partners IX | Fund Of Funds | 2014 | Buyouts | 2,000 | 1,260 | 295 | 1,386 | 17.57 | 1.33 | 0.23 | 0.63 | 15.97 |
| Commonfund International Partners VIII | Fund Of Funds | 2014 | Buyouts | 3,000 | 1,403 | 246 | 1,304 | 6.29 | 1.11 | 0.18 | 0.47 | 15.96 |
| Commonfund Natural Resources Partners X | Fund Of Funds | 2014 | Energy & Natural Resources | 9,500 | 4,845 | 864 | 5,660 | 38.18 | 1.35 | 0.18 | 0.51 | 17.98 |
| Commonfund Venture Partners XI | Fund Of Funds | 2015 | Venture Capital | 4,750 | 3,076 | 167 | 3,769 | 17.83 | 1.28 | 0.05 | 0.65 | 16.03 |
| GS Broad Street Senior Credit Partners | Partnership | 2015 | Other | 2,500 | 1,983 | 1,012 | 1,125 | 8.40 | 1.08 | 0.51 | 0.79 | 16.01 |
| Highbridge European Asset Value Offshore | Direct | 2016 | Other | 3,000 | 2,411 | 261 | 2,274 | 4.94 | 1.06 | 0.11 | 0.80 | 16.63 |
| GS Vintage VII Offshore | Secondary | 2016 | Secondaries | 4,921 | 2,518 | 563 | 2,489 | 43.96 | 1.21 | 0.22 | 0.51 | 18.89 |
| GS Co-Investment Partners II Offshore | Co-Investment | 2018 | Buyouts | 8,000 | 262 | - | 262 | 0.00 | 1.00 | 0.00 | 0.03 | 0.00 |
| Total Private Equity | Total Fund | | Hybrid | 159,154 | 126,548 | 98,826 | 78,179 | 9.38 | 1.40 | 0.78 | 0.79 | 10.59 |

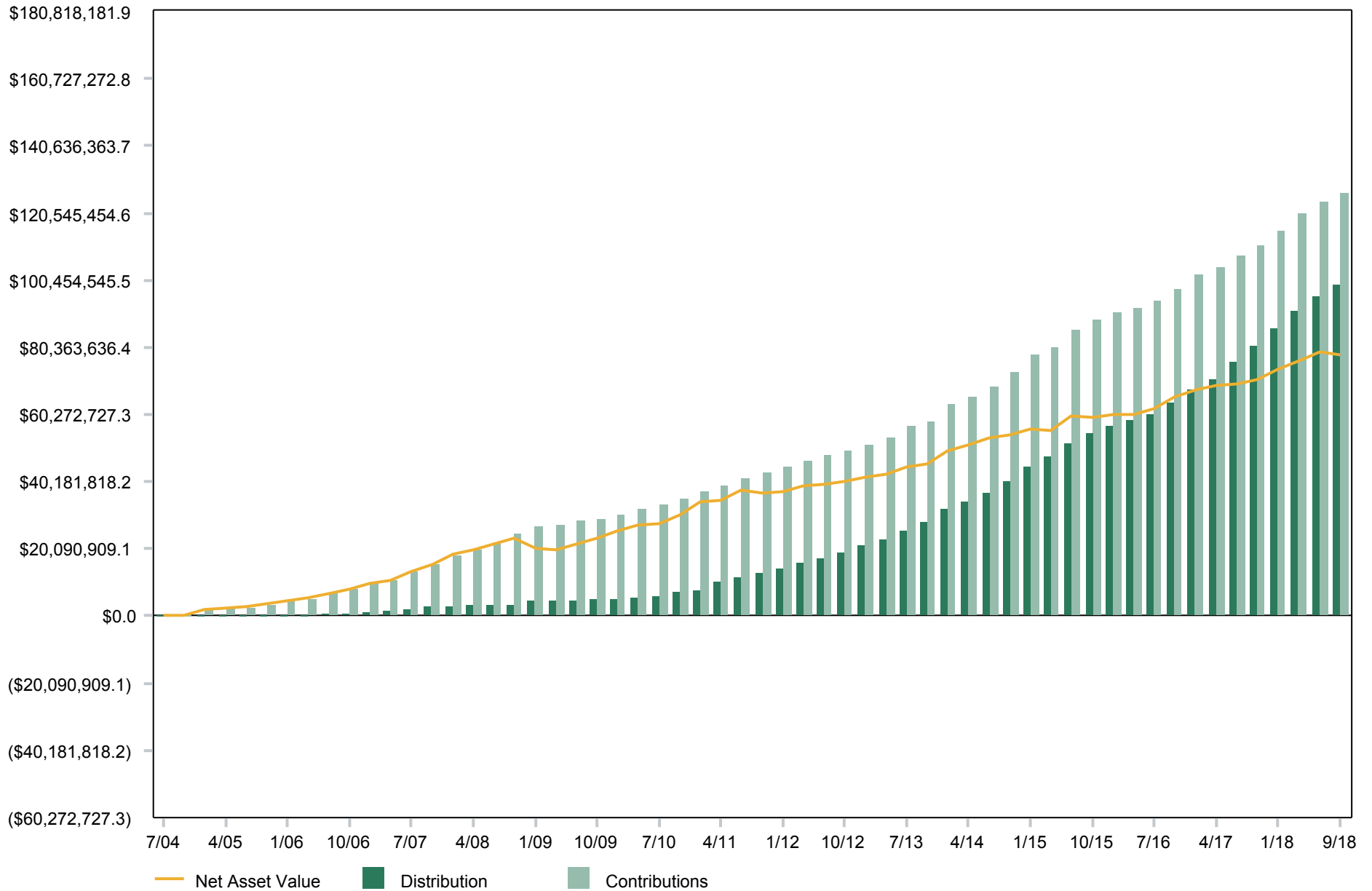
Cash Flow Summary

Capital Committed: \$159,153,673
Total Contributions: \$126,548,031
Remaining Capital Commitment: \$37,534,976

Total Distributions: \$98,826,388
Market Value: \$78,179,415

Inception Date: 07/20/2004
Inception IRR: 9.38
TVPI: 1.40

Cash Flow Analysis



Appendix

Total IPS OHA Benchmark

3/1/03 to 12/31/08:

| | | |
|--------------|--------------------------------|---|
| 27.8% | U.S. Large Cap Equity | 100.0% Russell 1000 Index |
| 11.1% | U.S. Small Cap Equity | 100.0% Russell 2000 Index |
| 11.1% | International Equity | 100.0% MSCI EAFE (Net) |
| 22.2% | Core Fixed Income | 100.0% Barclays U.S. Aggregate |
| 5.6% | High Yield Fixed Income | 100.0% Barclays U.S. Corporate High Yield |
| 11.1% | Global Real Estate | 25.0% FTSE NAREIT Equity 75.0% NCREIF |
| 11.1% | Absolute Return | 100.0% 3-month LIBOR + 4% |

1/1/09 to 8/30/09:

| | | |
|--------------|--|---|
| 37.5% | Traditional Global Equities | 100.0% MSCI All Country World (Net) |
| 20.5% | Traditional Global Fixed Income | 100.0% Barclays U.S. Aggregate |
| 10.0% | Global Real Estate | 50.0% FTSE NAREIT Equity 50.0% NCREIF |
| 15.0% | Absolute Return | 100.0% 3-month LIBOR + 3% |
| 12.5% | Equity Alternatives | 100.0% MSCI All Country World (Net) +3% |
| 2.5% | Fixed Income Alternatives | 100.0% Barclays U.S. Corporate High Yield +1% |
| 2.0% | Commodities | 100.0% S&P GS Commodities |

9/1/09 to 6/30/10:

| | | |
|--------------|--|---|
| 37.5% | Traditional Global Equities | 100.0% MSCI All Country World (Net) |
| 20.5% | Traditional Global Fixed Income | 100.0% Barclays U.S. Aggregate |
| 5.0% | Global Public Real Estate | 100.0% FTSE EPRA/NAREIT Developed |
| 5.0% | Global Private Real Estate | 100.0% NCREIF |
| 15.0% | Absolute Return | 100.0% 3-month T-Bill + 3% |
| 12.5% | Equity Alternatives | 100.0% MSCI All Country World (Net) +3% |
| 2.5% | Fixed Income Alternatives | 100.0% Barclays U.S. Corporate High Yield +1% |
| 2.0% | Commodities | 100.0% S&P GS Commodities |

7/1/10 to 6/30/11:

| | | |
|--------------|--|---|
| 37.5% | Traditional Global Equities | 100.0% MSCI All Country World IMI (Net) |
| 20.5% | Traditional Global Fixed Income | 100.0% Barclays U.S. Aggregate |
| 5.0% | Global Real Estate | 100.0% FTSE EPRA/NAREIT Developed |
| 15.0% | Absolute Return | 100.0% 3-month T-Bill + 3% |
| 12.5% | Equity Alternatives | 100.0% MSCI All Country World IMI (Net) +3% |
| 2.5% | Fixed Income Alternatives | 100.0% Barclays U.S. Corporate High Yield +1% |
| 2.0% | Commodities | 100.0% S&P GS Commodities |
| 5.0% | Hawaii Direct Investments | 100.0% Barclays U.S. TIPS +4.75% |

7/1/11 to 12/31/12:

| | | |
|--------------|--|---|
| 37.5% | Traditional Global Equities | 100.0% MSCI All Country World IMI (Net) |
| 20.5% | Traditional Global Fixed Income | 80.0% Barclays U.S. Aggregate 10.0% Merrill Lynch HY Master II 10.0% JPM GBI-EM Global Diversified |
| 5.0% | Global Public Real Estate | 100.0% FTSE EPRA/NAREIT Developed (Net) |
| 15.0% | Absolute Return | 50.0% T-Bills +4% 33.3% MSCI All Country World IMI (Net) 16.7% Merrill Lynch HY Master II |
| 12.5% | Equity Alternatives | 100.0% MSCI All Country World IMI (Net) +3% |
| 2.5% | Fixed Income Alternatives | 100.0% Merrill Lynch HY Master II + 1% |
| 2.0% | Commodities | 100.0% Bloomberg Commodity Index Total Return |
| 5.0% | Hawaii Direct Investments | 25.0% Barclays U.S. TIPS 20.0% DJ U.S. Select REIT TR 35.0% S&P Global Lrg MidCap Common Resources (Net) 20.0% DJ UBS Commodity TR |

1/1/13 to 6/30/14:

| | | |
|--------------|---|---|
| 38.5% | Traditional Global Equities | 100.0% MSCI All Country World IMI (Net) |
| 11.0% | Traditional Global Credit | 65.0% Barclays U.S. Credit Bond 15.0% JPM GBI-EM Global Diversified 15.0% Barclays U.S. High Yield – 2% Issuer Cap 5.0% JPM EMBI Global |
| 5.5% | Traditional Global Real Assets | 100.0% FTSE EPRA/NAREIT Developed (Net) |
| 8.0% | Enhanced Liquidity | n/a DJ UBS Commodity TR (Actual Weight) n/a Barclays U.S. Gov't (Actual Weight) |
| 5.0% | Hawaii Direct Investments | 25.0% Barclays U.S. TIPS 20.0% DJ U.S. Select REIT TR 35.0% S&P Global Lrg MidCap Common Resources (Net) 20.0% DJ UBS Commodity TR |
| 12.8% | Low Volatility Marketable Alternatives | 80.0% T-Bills +4% 20.0% DJ UBS Commodity TR |
| 12.8% | N.M. Equity | 100.0% MSCI All Country World IMI +3% (Qtr Lag) |
| 2.4% | N.M. Credit | 100.0% Merrill Lynch HY Master II + 1.5% (Qtr Lag) |
| 4.0% | N.M. Opportunistic & Real Assets | 25.0% Barclays U.S. TIPS 20.0% DJ U.S. Select REIT TR 35.0% S&P Global Lrg MidCap Common Resources (Net) 20.0% DJ UBS Commodity TR (Qtr Lag +3% per annum) |

7/1/14 to 10/31/2015:

| | | |
|--------------|---|---|
| 38.5% | Traditional Global Equities | 100.0% MSCI All Country World IMI (Net) |
| 11.0% | Traditional Global Credit | 65.0% Barclays U.S. Credit Bond 15.0% JPM GBI-EM Global Diversified 15.0% Barclays U.S. High Yield – 2% Issuer Cap 5.0% JPM EMBI Global |
| 5.5% | Traditional Global Real Assets | 100.0% FTSE EPRA/NAREIT Developed (Net) |
| 8.0% | Enhanced Liquidity | n/a Citigroup 3 Month T-Bill + 4% (Actual Weight) n/a Barclays U.S. Gov't (Actual Weight) |
| 5.0% | Hawaii Direct Investments | 25.0% Barclays U.S. TIPS 20.0% DJ U.S. Select REIT TR 35.0% S&P Global Lrg MidCap Common Resources (Net) 20.0% DJ UBS Commodity TR |
| 12.8% | Low Volatility Marketable Alternatives | 80.0% OHA Citigroup 3 Month T Bill + 4% 20.0% Bloomberg Commodity Index Total Return |
| 12.8% | N.M. Equity | 100.0% MSCI All Country World IMI +3% |
| 2.4% | N.M. Credit | 100.0% Merrill Lynch HY Master II + 1.5% |
| 4.0% | N.M. Opportunistic & Real Assets | 25.0% Barclays U.S. TIPS 20.0% DJ U.S. Select REIT TR 35.0% S&P Global Lrg MidCap Common Resources (Net) 20.0% DJ UBS Commodity TR (Qtr Lag +3% per annum) |

11/1/15 to 10/31/17:

| | | |
|--------------|---|---|
| 38.5% | Traditional Global Equities | 100.0% MSCI All Country World IMI (Net) |
| 11.0% | Traditional Global Credit | 65.0% Barclays U.S. Credit Bond 15.0% JPM GBI-EM Global Diversified 15.0% Barclays U.S. High Yield – 2% Issuer Cap 5.0% JPM EMBI Global |
| 5.5% | Traditional Global Real Assets | 100.0% FTSE EPRA/NAREIT Developed (Net) |
| 8.0% | Enhanced Liquidity | n/a Citigroup 3 Month T-Bill + 4% (Actual Weight) |
| 5.0% | Hawaii Direct Investments | 100.0% SSgA Real Asset Strategy |
| 12.8% | Low Volatility Marketable Alternatives | 100.0% Citigroup 3 Month T-Bill |
| 12.8% | N.M. Equity | 100.0% MSCI All Country World IMI +4% |
| 2.4% | N.M. Credit | 100.0% Merrill Lynch HY Master II + 1.5% |
| 4.0% | N.M. Opportunistic & Real Assets | 25.0% Barclays U.S. TIPS 20.0% DJ U.S. Select REIT TR 35.0% S&P Global Lrg MidCap Common Resources (Net) 20.0% DJ Brookfield Glb Infra (Qtr Lag +3% per annum) |

11/1/17 to Present:

- 40.0% Traditional Global Equities**
100.0% MSCI All Country World
- 17.0% Traditional Global Credit**
100.0% Bloomberg Barclays U.S. Aggregate
- 5.0% Traditional Global Real Assets**
100.0% Bloomberg Barclays U.S. TIPS +3%
- 12.0% Hedge Funds**
100.0% Citigroup 3 Month T-Bill +4%
- 18.0% Private Equity**
100.0% MSCI All Country World +3%
- 3.0% Enhanced Liquidity**
100.0% Bloomberg Barclays 1-3 Year Treasury
- 5.0% Hawaii Direct Investments**
100.0% Bloomberg Barclays U.S. TIPS +3%

Total IPS Traditional Assets Benchmark

1/1/11 to 6/30/11:

- 59.5% Traditional Global Equities**
100.0% MSCI All Country World IMI (Net)
- 32.5% Traditional Global Fixed Income**
100.0% Bloomberg Barclays U.S. Aggregate
- 8.0% Traditional Global Real Assets**
100.0% FTSE EPRA/NAREIT Developed

7/1/11 to 12/31/2012:

- 59.5% Traditional Global Equities**
100.0% MSCI All Country World IMI (Net)
- 32.5% Traditional Global Fixed Income**
80.0% Barclays U.S. Aggregate
10.0% Merrill Lynch HY Master II
10.0% JPM GBI-EM Global Diversified
- 8.0% Global Public Real Estate**
100.0% FTSE EPRA/NAREIT Developed (Net)

1/1/13 to 10/31/17:

- 70.0% Traditional Global Equities**
100.0% MSCI All Country World IMI (Net)
- 20.0% Traditional Global Fixed Income**
65.0% Barclays U.S. Credit Bond
15.0% JPM GBI-EM Global Diversified
15.0% Barclays U.S. High Yield – 2% Issuer Cap
5.0% JPM EMBI Global
- 10.0% Global Public Real Estate**
100.0% FTSE EPRA/NAREIT Developed (Net)

11/1/17 to Present:

- 64.5% Traditional Global Equities**
100.0% MSCI All Country World
- 27.4% Traditional Global Credit**
100.0% Bloomberg Barclays U.S. Aggregate
- 8.1% Traditional Global Real Assets**
100.0% Bloomberg Barclays U.S. TIPS +3%

Office of Hawaiian Affairs

Sonya K. Park

January 23, 2019

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Appendices

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Appendix B: Biography

All the information contained in this presentation is as of date Indicated unless otherwise noted.

Account Summary

Office of Hawaiian Affairs — Account Summary

Investment Summary

As of September 30, 2018

| | Market Value (\$) |
|---|-------------------|
| State Street Real Asset NL Strategy | 19,707,816 |
| State Street Real Asset NL CTF | 2,295,161 |
| State Street 1–3 Year US Treasury Index NL Strategy | 7,031,733 |
| State Street 1–3 Year US Credit Index NL Strategy | 3,414,048 |
| Total | 32,448,757 |

Statement of Asset Changes

The following changes took place in the Office of Hawaiian Affairs account for the period of: July 01, 2018 to September 30, 2018

| | Starting Balance 07/01/2018 (\$) | Contributions (\$) | Withdrawals (\$) | Appreciation/ (Depreciation)* (\$) | Ending Balance 09/30/2018 (\$) |
|---|-------------------------------------|--------------------|--------------------|---------------------------------------|-----------------------------------|
| State Street Real Asset NL Strategy | 19,832,002 | — | — | (124,186) | 19,707,816 |
| State Street Real Asset NL CTF | 2,309,623 | — | — | (14,462) | 2,295,161 |
| State Street 1–3 Year US Treasury Index NL Strategy | 7,018,054 | — | — | 13,679 | 7,031,733 |
| State Street 1–3 Year US Credit Index NL Strategy | 10,362,693 | — | (7,000,000) | 51,355 | 3,414,048 |
| Total | 39,522,372 | — | (7,000,000) | (73,615) | 32,448,757 |

Source: SSGA

* Includes dividends, interest, and realized/unrealized gains and losses.

Office of Hawaiian Affairs — Account Summary

Summary of Performance

Following are the gross and net returns for the Office of Hawaiian Affairs portfolios versus the corresponding benchmarks as of September 30, 2018:

| | 1 Month (%) | 3 Months (%) | Year to Date (%) | 1 Year (%) | 3 Years (%) | 5 Years (%) | Since Inception (%) | Inception Date |
|--|--------------|--------------|------------------|--------------|--------------|--------------|---------------------|-----------------|
| State Street Real Asset NL Strategy | | | | | | | | May/2013 |
| Total Returns [Gross] | 0.46 | -0.63 | 0.07 | 3.83 | 6.87 | 1.25 | 0.20 | |
| Real Assets Custom Blended Index | 0.50 | -0.60 | 0.12 | 3.90 | 6.92 | 1.23 | 0.19 | |
| Difference | -0.05 | -0.02 | -0.05 | -0.07 | -0.05 | 0.02 | 0.01 | |
| Total Returns [Net] | 0.44 | -0.68 | -0.10 | 3.59 | 6.62 | 1.02 | -0.03 | |
| Real Assets Custom Blended Index | 0.50 | -0.60 | 0.12 | 3.90 | 6.92 | 1.23 | 0.19 | |
| Difference | -0.06 | -0.07 | -0.23 | -0.31 | -0.30 | -0.22 | -0.22 | |
| State Street Real Asset NL CTF | | | | | | | | Nov/2016 |
| Total Returns [Gross] | 0.46 | -0.63 | 0.07 | 3.83 | N/A | N/A | 6.32 | |
| Real Assets Custom Blended Index | 0.50 | -0.60 | 0.12 | 3.90 | N/A | N/A | 6.30 | |
| Difference | -0.05 | -0.02 | -0.05 | -0.07 | N/A | N/A | 0.02 | |
| Total Returns [Net] | 0.42 | -0.74 | -0.21 | 3.42 | N/A | N/A | 5.94 | |
| Real Assets Custom Blended Index | 0.50 | -0.60 | 0.12 | 3.90 | N/A | N/A | 6.30 | |
| Difference | -0.09 | -0.13 | -0.33 | -0.48 | N/A | N/A | -0.36 | |

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

Office of Hawaiian Affairs — Account Summary

Summary of Performance

Following are the gross and net returns for the Office of Hawaiian Affairs portfolios versus the corresponding benchmarks as of September 30, 2018

| | 1 Month (%) | 3 Months (%) | Year to Date (%) | 1 Year (%) | 3 Years (%) | 5 Years (%) | Since Inception (%) | Inception Date |
|--|--------------|--------------|------------------|--------------|-------------|-------------|---------------------|-----------------|
| State Street 1–3 Year US Treasury Index | | | | | | | | Jan/2018 |
| NL Strategy | | | | | | | | |
| Total Returns [Net] | -0.13 | 0.19 | N/A | N/A | N/A | N/A | 0.46 | |
| Bloomberg Barclays U.S. 1–3 Year Treasury Bond Index | -0.12 | 0.19 | N/A | N/A | N/A | N/A | 0.46 | |
| Difference | -0.01 | 0.00 | N/A | N/A | N/A | N/A | 0.00 | |
| State Street 1–3 Year US Credit Index | | | | | | | | Feb/2017 |
| NL Strategy | | | | | | | | |
| Total Returns [Gross] | 0.04 | 0.63 | 0.75 | 0.65 | N/A | N/A | 1.22 | |
| Bloomberg Barclays U.S. 1–3 Year Credit Bond Index | 0.03 | 0.62 | 0.73 | 0.66 | N/A | N/A | 1.23 | |
| Difference | 0.01 | 0.00 | 0.02 | -0.01 | N/A | N/A | -0.01 | |
| Total Returns [Net] | 0.02 | 0.58 | 0.65 | 0.53 | N/A | N/A | 1.11 | |
| Bloomberg Barclays U.S. 1–3 Year Credit Bond Index | 0.03 | 0.62 | 0.73 | 0.66 | N/A | N/A | 1.23 | |
| Difference | -0.01 | -0.04 | -0.09 | -0.13 | N/A | N/A | -0.12 | |

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

Office of Hawaiian Affairs — Account Summary

Investment Summary

As of September 30, 2018

| | Market Value (\$) |
|--------------------------------------|-------------------|
| State Street Aggregate Bond Index K | 32,115,334 |
| State Street Global Equity EX US K | 22,931,137 |
| State Street Equity 500 Index Fund K | 35,822,524 |
| Total | 90,868,995 |

Statement of Asset Changes

The following changes took place in the Office of Hawaiian Affairs account for the period of July 01, 2018 to September 30, 2018:

| | Starting Balance 07/01/2018 (\$) | Contributions (\$) | Withdrawals (\$) | Appreciation/ (Depreciation)* (\$) | Ending Balance 09/30/2018 (\$) |
|--------------------------------------|-------------------------------------|--------------------|------------------|---------------------------------------|-----------------------------------|
| State Street Aggregate Bond Index K | 32,128,364 | 222,994 | — | (236,024) | 32,115,334 |
| State Street Global Equity EX US K | 22,754,234 | — | — | 176,904 | 22,931,137 |
| State Street Equity 500 Index Fund K | 33,274,478 | — | — | 2,548,046 | 35,822,524 |
| Total | 88,157,076 | 222,994 | — | 2,488,925 | 90,868,995 |

Source: SSGA

* Includes dividends, interest, and realized/unrealized gains and losses.

Office of Hawaiian Affairs — Account Summary

Summary of Performance

Following are net returns for the Office of Hawaiian Affairs portfolios versus the corresponding benchmarks as of September 30, 2018:

| | 3 Months (%) | Year to Date (%) | 1 Year (%) | 3 Years (%) | 5 Years (%) | 10 Years (%) | Since Inception (%) | Inception Date |
|---|-----------------|---------------------|---------------|----------------|----------------|-----------------|---------------------------|-------------------|
| State Street Aggregate Bond Index K | | | | | | | | Sep/2014 |
| Total Returns [Net] | -0.04 | -1.71 | -1.43 | 1.09 | N/A | N/A | 1.56 | |
| Bloomberg Barclays Aggregate Bond | 0.02 | -1.60 | -1.22 | 1.31 | N/A | N/A | 1.77 | |
| Difference | -0.06 | -0.11 | -0.21 | -0.22 | NA | NA | -0.21 | |
| State Street Global Equity EX US K | | | | | | | | Sep/2014 |
| Total Returns [Net] | 0.78 | -2.90 | 1.86 | 9.87 | N/A | N/A | 2.95 | |
| MSCI ACWI ex USA Index | 0.71 | -3.09 | 1.76 | 9.97 | N/A | N/A | 3.06 | |
| Difference | 0.07 | 0.19 | 0.10 | -0.10 | NA | NA | -0.11 | |
| State Street Equity 500 Index Fund K | | | | | | | | Apr/2001 |
| Total Returns [Net] | 7.66 | 10.55 | 17.79 | 17.25 | 13.79 | 11.82 | N/A | |
| S&P 500 Index | 7.71 | 10.56 | 17.91 | 17.31 | 13.95 | 11.97 | N/A | |
| Difference | -0.05 | -0.01 | -0.12 | -0.06 | -0.16 | -0.15 | NA | |

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

Office of Hawaiian Affairs — Account Summary

Investment Summary

As of December 31, 2018

| | Market Value (\$) |
|---|-------------------|
| State Street Real Asset NL Strategy | 17,306,866 |
| State Street Real Asset NL CTF | 2,131,678 |
| State Street 1–3 Year US Treasury Index NL Strategy | 7,117,340 |
| State Street 1–3 Year US Credit Index NL Strategy | 11,583,159 |
| Total | 38,139,043 |

Statement of Asset Changes

The following changes took place in the Office of Hawaiian Affairs account for the period of October 01, 2018 to December 31, 2018:

| | Starting Balance 10/01/2018 (\$) | Contributions (\$) | Withdrawals (\$) | Appreciation/ (Depreciation)* (\$) | Ending Balance 12/31/2018 (\$) |
|---|-------------------------------------|--------------------|--------------------|---------------------------------------|-----------------------------------|
| State Street Real Asset NL Strategy | 19,707,816 | — | (1,042,061) | (1,358,889) | 17,306,866 |
| State Street Real Asset NL CTF | 2,295,161 | — | — | (163,483) | 2,131,678 |
| State Street 1–3 Year US Treasury Index NL Strategy | 7,031,733 | — | (6,836) | 92,443 | 7,117,340 |
| State Street 1–3 Year US Credit Index NL Strategy | 3,414,048 | 8,100,000 | (35,487) | 104,598 | 11,583,159 |
| Total | 32,448,757 | 8,100,000 | (1,084,384) | (1,325,330) | 38,139,043 |

Source: SSGA

* Includes dividends, interest, and realized/unrealized gains and losses.

Office of Hawaiian Affairs — Account Summary

Summary of Performance

Following are the gross and net returns for the Office of Hawaiian Affairs portfolios versus the corresponding benchmarks as of December 31, 2018:

| | 1 Month (%) | 3 Months (%) | Year to Date (%) | 1 Year (%) | 3 Years (%) | 5 Years (%) | Since Inception (%) | Inception Date |
|--|--------------|--------------|------------------|--------------|--------------|--------------|---------------------|-----------------|
| State Street Real Asset NL Strategy | | | | | | | | May/2013 |
| Total Returns [Gross] | -3.74 | -7.12 | -7.06 | -7.06 | 4.91 | -0.33 | -1.12 | |
| Real Assets Custom Blended Index | -3.73 | -7.16 | -7.04 | -7.04 | 4.97 | -0.36 | -1.13 | |
| Difference | -0.01 | 0.03 | -0.01 | -0.01 | -0.06 | 0.03 | 0.01 | |
| Total Returns [Net] | -3.75 | -7.18 | -7.28 | -7.28 | 4.67 | -0.56 | -1.35 | |
| Real Assets Custom Blended Index | -3.73 | -7.16 | -7.04 | -7.04 | 4.97 | -0.36 | -1.13 | |
| Difference | -0.02 | -0.02 | -0.23 | -0.23 | -0.30 | -0.20 | -0.22 | |
| State Street Real Asset NL CTF | | | | | | | | Nov/2016 |
| Total Returns [Gross] | -3.74 | -7.12 | -7.06 | -7.06 | N/A | N/A | 2.00 | |
| Real Assets Custom Blended Index | -3.73 | -7.16 | -7.04 | -7.04 | N/A | N/A | 1.97 | |
| Difference | -0.01 | 0.03 | -0.01 | -0.01 | N/A | N/A | 0.03 | |
| Total Returns [Net] | -3.77 | -7.23 | -7.42 | -7.42 | N/A | N/A | 1.63 | |
| Real Assets Custom Blended Index | -3.73 | -7.16 | -7.04 | -7.04 | N/A | N/A | 1.97 | |
| Difference | -0.04 | -0.07 | -0.38 | -0.38 | N/A | N/A | -0.34 | |

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

Office of Hawaiian Affairs — Account Summary

Summary of Performance

Following are the gross net returns for the Office of Hawaiian Affairs portfolios versus the corresponding benchmarks as of December 31, 2018

| | 1 Month (%) | 3 Months (%) | Year to Date (%) | 1 Year (%) | 3 Years (%) | 5 Years (%) | Since Inception (%) | Inception Date |
|--|-------------|--------------|------------------|--------------|-------------|-------------|---------------------|-----------------|
| State Street 1–3 Year US Treasury Index | | | | | | | | Jan/2018 |
| NL Strategy | | | | | | | | |
| Total Returns [Net] | 0.80 | 1.32 | N/A | N/A | N/A | N/A | 1.78 | |
| Bloomberg Barclays U.S. 1–3 Year Treasury Bond Index | 0.81 | 1.31 | N/A | N/A | N/A | N/A | 1.78 | |
| Difference | 0.00 | 0.00 | N/A | N/A | N/A | N/A | 0.00 | |
| State Street 1–3 Year US Credit Index | | | | | | | | Feb/2017 |
| NL Strategy | | | | | | | | |
| Total Returns [Gross] | 0.74 | 0.92 | 1.68 | 1.68 | N/A | N/A | 1.55 | |
| Bloomberg Barclays U.S. 1–3 Year Credit Bond Index | 0.72 | 0.89 | 1.64 | 1.64 | N/A | N/A | 1.54 | |
| Difference | 0.01 | 0.03 | 0.05 | 0.05 | N/A | N/A | 0.00 | |
| Total Returns [Net] | 0.73 | 0.88 | 1.54 | 1.54 | N/A | N/A | 1.44 | |
| Bloomberg Barclays U.S. 1 3 Year Credit Bond Index | 0.72 | 0.89 | 1.64 | 1.64 | N/A | N/A | 1.54 | |
| Difference | 0.01 | -0.01 | -0.10 | -0.10 | N/A | N/A | -0.11 | |

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

Office of Hawaiian Affairs — Account Summary

Investment Summary

As of December 31, 2018

| | Market Value (\$) |
|--------------------------------------|-------------------|
| State Street Aggregate Bond Index K | 29,469,244 |
| State Street Global Equity EX US K | 24,104,134 |
| State Street Equity 500 Index Fund K | 28,216,189 |
| Total | 81,789,567 |

Statement of Asset Changes

The following changes took place in the Office of Hawaiian Affairs account for the period of October 01, 2018 to December 31, 2018:

| | Starting Balance 10/01/2018 (\$) | Contributions (\$) | Withdrawals (\$) | Appreciation/ (Depreciation)* (\$) | Ending Balance 12/31/2018 (\$) |
|--------------------------------------|-------------------------------------|--------------------|------------------|---------------------------------------|-----------------------------------|
| State Street Aggregate Bond Index K | 32,115,334 | 296,867 | 3,100,000 | 157,043 | 29,469,244 |
| State Street Global Equity EX US K | 22,931,137 | 5,849,576 | — | (4,676,580) | 24,104,134 |
| State Street Equity 500 Index Fund K | 35,822,524 | 1,388,185 | 3,000,000 | (5,994,519) | 28,216,189 |
| Total | 90,868,995 | 7,534,628 | 6,100,000 | (10,514,056) | 81,789,567 |

Source: SSGA

* Includes dividends, interest, and realized/unrealized gains and losses.

Office of Hawaiian Affairs — Account Summary

Summary of Performance

Following are net returns for the Office of Hawaiian Affairs portfolios versus the corresponding benchmarks as of December 31, 2018:

| | 3 Months (%) | Year to Date (%) | 1 Year (%) | 3 Years (%) | 5 Years (%) | 10 Years (%) | Since Inception (%) | Inception Date |
|---|--------------|------------------|--------------|--------------|--------------|--------------|---------------------|-----------------|
| State Street Aggregate Bond Index K | | | | | | | | Sep/2014 |
| Total Returns [Net] | 1.64 | -0.10 | -0.10 | 1.81 | N/A | N/A | 1.86 | |
| Bloomberg Barclays Aggregate Bond | 1.64 | 0.01 | 0.01 | 2.06 | N/A | N/A | 2.05 | |
| Difference | 0.00 | -0.11 | -0.11 | -0.25 | NA | NA | NA | |
| State Street Global Equity EX US K | | | | | | | | Sep/2014 |
| Total Returns [Net] | -11.46 | -14.03 | -14.03 | 4.69 | N/A | N/A | -0.10 | |
| MSCI ACWI ex USA Index | -11.46 | -14.20 | -14.20 | 4.48 | N/A | N/A | 0.00 | |
| Difference | 0.00 | 0.17 | 0.17 | 0.21 | NA | NA | -0.10 | |
| State Street Equity 500 Index Fund K | | | | | | | | Apr/2001 |
| Total Returns [Net] | -13.54 | -4.42 | -4.42 | 9.16 | 8.35 | 12.91 | 6.19 | |
| S&P 500 Index | -13.52 | -4.38 | -4.38 | 9.26 | 8.49 | 13.12 | 6.16 | |
| Difference | -0.02 | -0.04 | -0.04 | -0.10 | -0.14 | -0.21 | 0.03 | |

Past performance is not a guarantee of future results. Performance returns for periods of less than one year are not annualized. The performance figures contained herein are provided on a gross and net of fees basis. Gross of fees do not reflect and net of fees do reflect the deduction of advisory or other fees which could reduce the return. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in US dollars.

Equity Indexing Skillfully Delivered

Who We Are

Why State Street Global Advisors for Index, Smart Beta & ESG Investing

Core Focus Area and Key Strength

- 40 year history of delivering high quality, broad based index solutions
- Index represents 80%¹ of assets under management and 68%¹ of revenues
- >98%¹ of equity index funds have historically tracked within their tolerance bands

Industry Leader and Innovator

- ✓ Launched first US ETF
- ✓ In-house index creation
- ✓ Developing smart beta since 2006

Groundbreaking efforts in ESG research and integrated portfolio solutions In-house proprietary ESG framework and screening tool

Experienced and Reliable Team

- 20 years average portfolio manager tenure
- Utilize a globally consistent investment management platform and processes
- Strategic focus on implementation and risk management
- Deep Research expertise with innovative heritage

¹ Source: State Street Global Advisors, June 2018.

Investment Philosophy

We aim to deliver to each client the returns and characteristics of a targeted index or strategy

We believe in...

Integration of technology & human insight

- Maintain a primary portfolio manager structure while using a state of the art portfolio management platform
- Continuous investment in our technology infrastructure to gain further efficiencies

Supporting long-term shareholder values

- Engage with investee companies to promote responsible investing and protect long term shareholder returns through asset stewardship
- Firm wide proxy voting platform

Innovating through research

- Value add strategies based on core beta research
- Development of propriety strategies and indexes
- ESG screening tools & framework, thematic strategies and portfolio integration

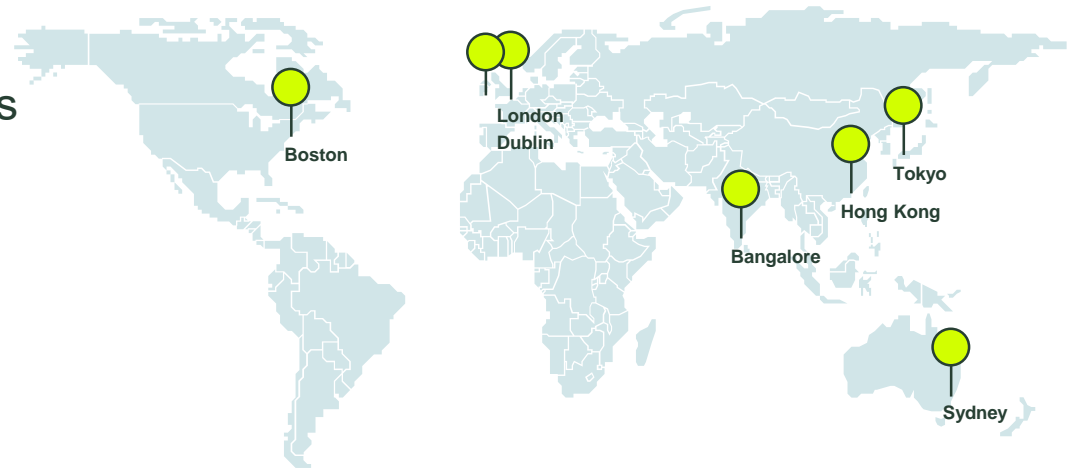
Source: State Street Global Advisors

State Street Global Equity Beta Solutions

150+¹ Dedicated professionals to equity indexing across the firm

30+ Traders & analysts

10+ Equity strategists & specialists



| | |
|-----------------|---------|
| CIO | Exp Yrs |
| Lynn Blake, CFA | 31 |

| | |
|--------------------------|---------|
| Senior Leadership | Exp Yrs |
| Mike Feehily, CFA (US) | 26 |

| | |
|------------------------------|---------|
| Portfolio Strategists | Exp Yrs |
| Heather Apperson | 14 |

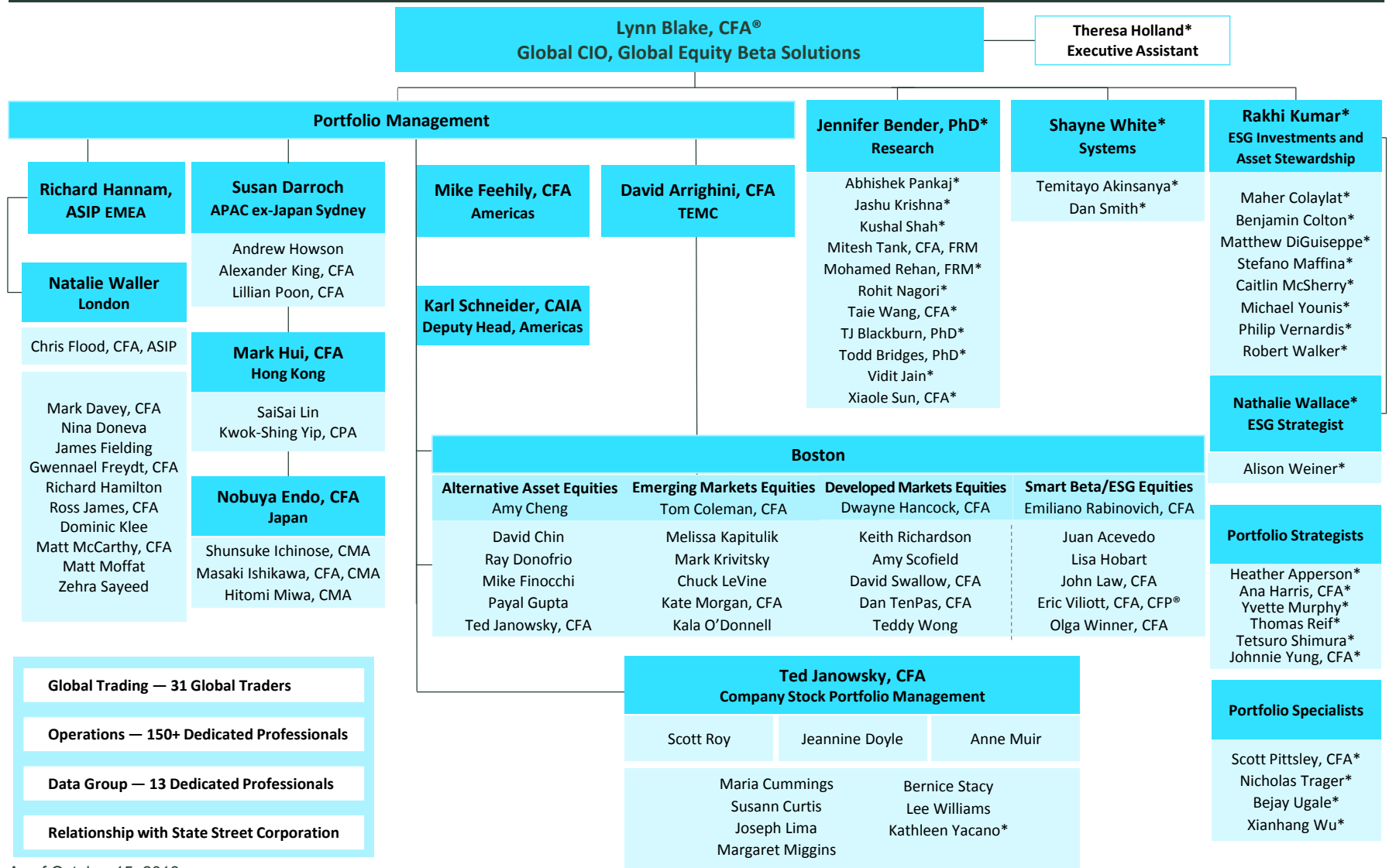
Team Highlights

| | |
|--------------------------------------|----|
| Investment Team Members ² | 62 |
| Average Experience Years | 20 |
| Number of CFA Charter Holders | 27 |
| Number of PhDs | 3 |

| | |
|--|----|
| Richard Hannam, ASIP (EMEA) | 34 |
| Susan Darroch, (Asia Pac) | 33 |
| David Arrighini, CFA (TEMC) | 28 |
| Jennifer Bender, PhD ³ (Research) | 22 |
| Rakhi Kumar, (ESG/ Stewardship) | 17 |
| Shayne White (Technology) | 26 |

| | |
|-------------------|----|
| Ana Harris, CFA | 14 |
| Yvette Murphy | 10 |
| Thomas Reif | 24 |
| Tetsuro Shimura | 32 |
| Johnnie Yung, CFA | 32 |

As of October 15, 2018. ¹ Includes Global Equity Beta Solutions Team Members who may not be reflected in the organization chart above. ² Investment Team members include portfolio managers and researchers. ³ Does not manage assets for the Global Equity Beta Solutions team. CFA[®] is a trademark of the CFA Institute. CAIA[®] is a registered trademark of the Chartered Alternative Investment Analyst Association.



As of October 15, 2018

* Does not manage assets for the Global Equity Beta Solutions team. CFA® is a trademark owned by CFA Institute. Certified Financial Planner Board of Standards Inc. owns the certification marks CFP®, CERTIFIED FINANCIAL PLANNER™ and federally registered CFP (with flame design) in the US, which it awards to individuals who successfully complete CFP Board's initial and ongoing certification requirements.

ESG & Asset Stewardship

Head of ESG & Asset Stewardship

Rakhi Kumar



Our Belief

Companies embracing ESG best practice have strong, effective, independent boards and are able to incorporate sustainability into their long term strategy.

ESG

- **Proprietary** ESG research and innovation driving multi asset classes solutions
- **Strong focus** on independent board leadership, financial impacts of climate change and other crucial ESG issues like gender diversity

Asset Stewardship

- **Alignment** of asset stewardship, portfolio management, research, technology and ESG solutions
- Commissioned the **Fearless Girl** statue and developed the **Gender Diversity Index**

30+ Years

of commitment to ESG investors

\$202B¹

assets under management in ESG

301² of the 700

companies we called on made positive progress on board gender diversity



Photo:
Sculpture by Kristen Visbal.

Source: State Street Global Advisors. ¹ Data as of June 30, 2018 and listed in USD.

² 152 added a female board member, and 34 pledged to do so.

Robust Research Guides Investment Decisions & Strategy Design

Global Head of Research

Jennifer Bender,* PhD



Global Team

Global Headcount **11**

Members with PhD **3**

Peer-reviewed articles & chapters authored **17**



Core Beta

Adding incremental value through risk-aware implementation and cost-reduction strategies, and strategic execution of index changes

Smart Beta

Blending empirical and theoretical research, and balancing intuition and complexity make us a leader in factor definition, combination, and implementation

Thematic & ESG

Identifying and capturing ESG-driven risks and opportunities and optimal portfolio construction across a spectrum of ESG exposures

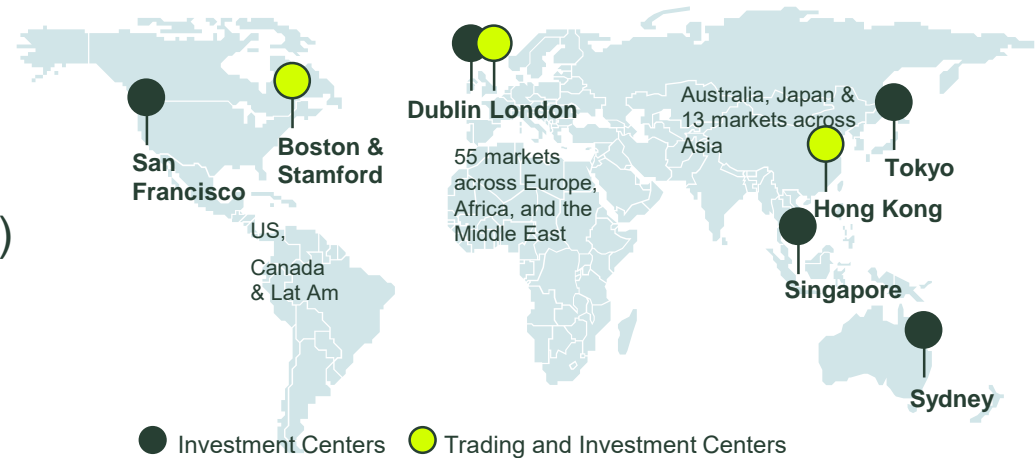
Self-Indexed & Proprietary Beta

Developing innovative solutions while incorporating implementation insights into our range of cap-weighted, factor, and ESG indexes

As of September 30, 2018. * Does not manage assets for the Global Equity Beta Solutions team.

Global Trading

- 17 year global desk in place
- 24 hour trading capabilities
- 30+ Traders (Equity & Fixed Income)
- +18 year's average experience
- \$2.3 Trillion dollars traded in 2017
- 2.9 Million tickets executed in 2017



What Differentiates Us from the Competition?

Spectrum of Trading Tools

- **Internal crossing network:** Use of security & unit level crossing when possible to minimize transactions costs
- **Algo Wheel:** Seeks to reward better performing algorithmic trading strategies and remove trader bias through a performance driven broker selection process

Trading Analytics Group (TCA)

- Cross asset class team performing transaction cost analysis, data and analytics reporting, as well as market research
- TCA results incorporated into Algo selection process
- Quarterly review of best execution and governance oversight framework

Connectivity & Expertise

- Regional trading desks with local expertise — coverage across 95 global markets
- Strong partnership between trading, portfolio management and research helps drive value-add strategies and routine implementation decisions

As of December 31, 2017. Asset classes include equity, fixed income, futures and currency. Figures are in USD.

Industry Trends Q3 2018

| | | | |
|---|--|---|--|
| Flows/Markets | <p>Investors continued to de-risk, although US equity markets hit new highs and rates edged higher.</p> <ul style="list-style-type: none"> Concerns over slowing growth, global trade and rising rates drove investor sentiment. Non-US equities, specifically EM continued to see outflows. Recent investor surveys showing the largest overweight in US equities in three years and don't expect a rotation in bonds until US 10 yr yields hit 3.7%¹ | | |
| Smart Beta / Factor Investing | <p>Focus area for institutions but implementation and manager solutions vary</p> <ul style="list-style-type: none"> 30% YoY growth rate in smart beta strategies since 2012, while 'standard' passive strategies grew 13% a year during the same period² Thoughtful implementation coupled with the ability to clearly capture and attribute factor contributions are key manager differentiators Seeing renewed interest in low volatility and value strategies given the market environment | | |
| Self Indexing | <p>Increasing number of asset managers announcing plans to self index</p> <ul style="list-style-type: none"> Benefits include increased flexibility, lower explicit cost (i.e., licensing fees) and potentially lower implicit costs Increasing number of ETF managers moving towards self indexed products in fixed income and smart beta | | |
| Asset Stewardship & ESG | <p>Dedication to asset stewardship & ESG initiatives becoming more common — however standards still vary</p> <ul style="list-style-type: none"> In a recent survey, 84%³ of respondents said to be pursuing or considering ESG integration in their investment process. 60% of respondents began doing so in the last four years. Institutions demanding more transparency — what do I own and what is the impact? Reporting on ESG metrics likely to become the norm but the industry is still establishing a base line measurement framework | | |
| Noteworthy Index Events | <table border="0"> <tr> <td data-bbox="421 1003 1242 1225"> <p>MSCI</p> <ul style="list-style-type: none"> Consultation underway to increase China A from 5% to 20%, as well as add midcap stocks. Announcement set for Feb 2019 Saudi Arabia and Argentina to be promoted to Emerging Market status in May 2019 In March 2019, companies with unequal voting structures, will be eligible for inclusion in MSCI standard indices </td> <td data-bbox="1251 1003 1843 1225"> <p>FTSE</p> <ul style="list-style-type: none"> Announces formal addition of China A shares. Estimated around 5% initially and set to be added in multiple tranches </td> </tr> </table> | <p>MSCI</p> <ul style="list-style-type: none"> Consultation underway to increase China A from 5% to 20%, as well as add midcap stocks. Announcement set for Feb 2019 Saudi Arabia and Argentina to be promoted to Emerging Market status in May 2019 In March 2019, companies with unequal voting structures, will be eligible for inclusion in MSCI standard indices | <p>FTSE</p> <ul style="list-style-type: none"> Announces formal addition of China A shares. Estimated around 5% initially and set to be added in multiple tranches |
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¹ BAML Monthly Manager Survey, September and October 2018. ² Boston Consulting Group, May 4, 2018. Unless otherwise noted, all data as of June 30, 2018.

³ Morgan Stanley, Sustainability Signals, June 2018.

What We Do

A Long History of Indexing Innovation

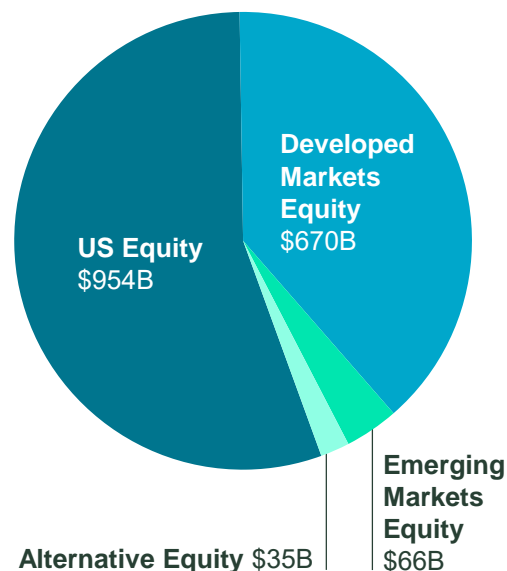
| 1970s | 1990s | 2000s | 2010s |
|--|---|--|---|
| Standard Indices | | FTSE RAFI US 1000 S&P HY Div Aristocrats | Nikkei 225 FTSE RAFI ALL World 3000 MSCI Min Volatility |
| | | | RAFI Low Vol MSCI World Equally-weighted Russell 1000 Single Factors FTSE EDHEC Risk Efficient EM MSCI Quality Mix Series |
| | | | Kensho New Economies Indices |
| Our Proprietary Strategies: Tilted, Optimized, ESG (Multifactor) | State Street Global Advisors launched International Index Fund and S&P Strategy (1979) | SSGA S&P 500 Equal Weighted (1993) | SSGA US Valuation-Tilted |
| | | SSGA Global Managed Vol SSGA Global Size Tilted SSGA Global Valuation Tilted | SSGA Europe Managed Vol SSGA Canadian Div Tilted |
| | | | SSGA Global Multi-factor SSGA US Multi-factor SSGA Europe Multi-factor |
| | | | Gender Diversity Index — Multi-Factor Optimized US Cap Weighted Self Indices — Multi-Factor + ESG |

Source: State Street Global Advisors, as of June 30, 2018. Inception date of select portfolios.

A Leading Manager of Global Indexed Assets

Equity Index AUM: \$1.72 Trillion (USD)

Breakdown of Global AUM



Cap Weighted

- US, Developed ex US, Emerging Markets
- Large, Mid & Small Cap

Style/Sector

- Value & Growth
- Sector/Industry Specific
- ESG

Smart Beta

- Third-Party Indices
- Proprietary Solutions-Tilted, Multifactor & ESG

Alternatives

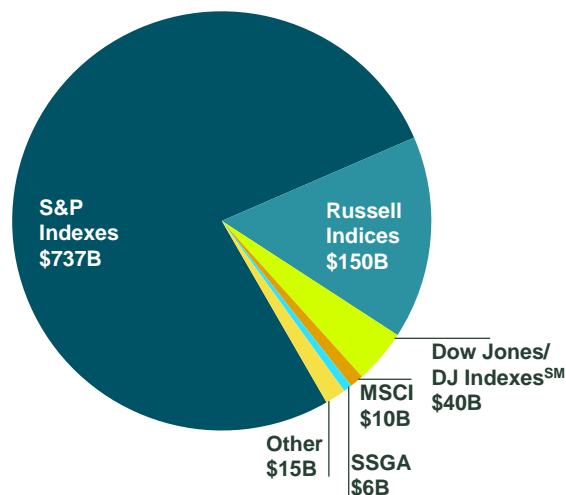
- Commodity
- REITs
- Infrastructure
- Natural Resources

Source: State Street Global Advisors. As of September 30, 2018. Exclusive of Emerging Markets Equities invested in other MSCI-benchmarked strategies such as MSCI ACWI and MSCI ACWI ex-US. Data as of September 30, 2018

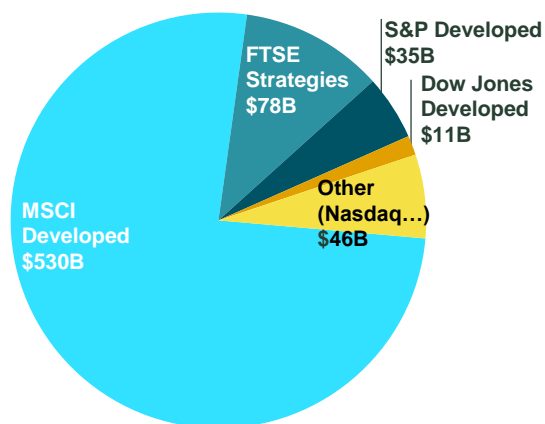
A Leading Manager of Global Indexed Assets

Total Global Equity Beta Solutions Assets Under Management: \$1.72 Trillion (USD) as of September 30, 2018

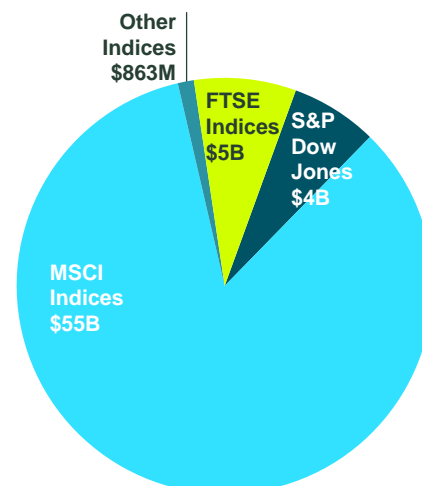
US Index AUM
\$960B



International & Global Equity AUM \$699B



Emerging Markets Equity AUM \$66B



Source: State Street Global Advisors. As of September 30, 2018.

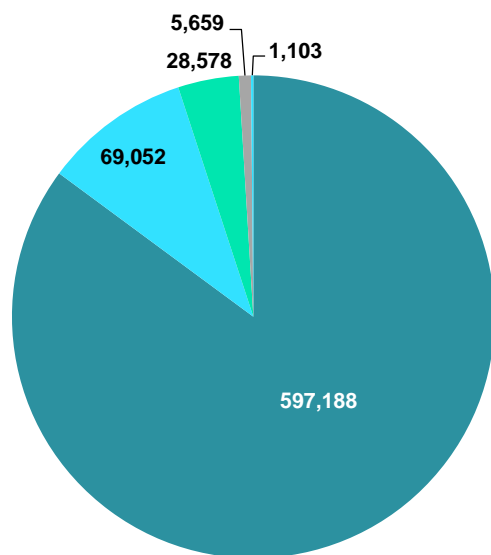
Exclusive of Emerging Markets Equities invested in other MSCI-benchmarked strategies such as MSCI ACWI and MSCI ACWI ex-US.

SPDR: Third Largest ETF Manager

ETF AUM: \$702 Billion

Offerings: 254

Global AUM by Asset Class



■ Equity ■ Fixed Income ■ Commodities ■ Convertibles ■ Allocation

Global ETF AUM

| Region | Country of Domicile | ETF Offerings | Assets (\$M) |
|----------|---------------------|---------------|--------------|
| Americas | United States | 140 | 651,618 |
| EMEA | Ireland | 94 | 30,632 |
| APAC | Australia | 16 | 4,216 |
| | Hong Kong | 2 | 10,972 |
| | Singapore | 2 | 4,141 |

Source: Morningstar, as of September 30, 2018.

State Street Global Advisors' Smart Beta Equity Strategies & AUM

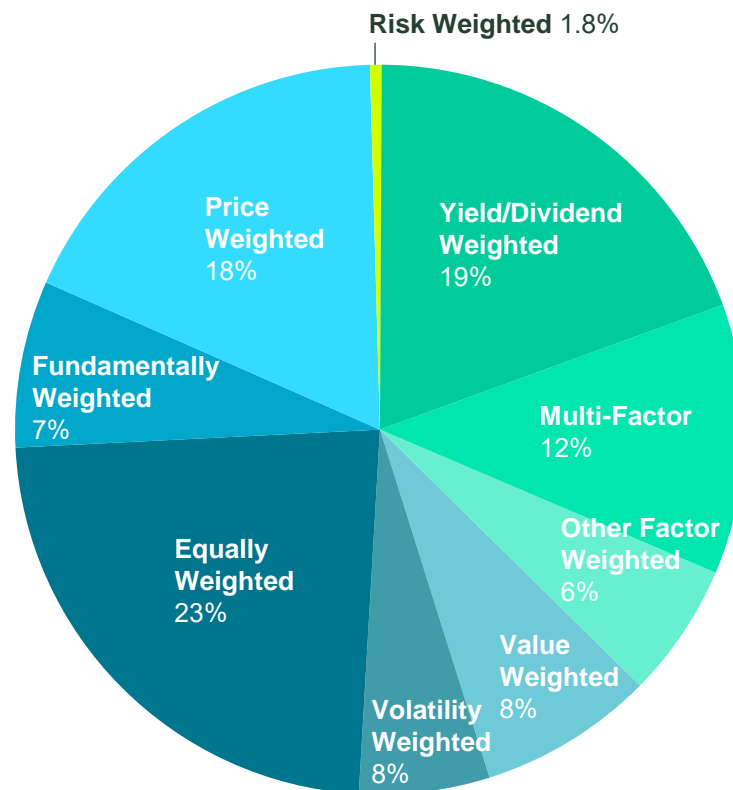
Total Smart Beta AUM \$140B

State Street has been managing Smart Beta portfolios for over 25 years

- Huge selection of strategies to meet varying interests of investors
- At forefront of research and development of Smart Beta solutions

Investor flows into Smart Beta continues to be positive

- In recent years, most interest in Low Volatility, Multi-Factor and Multi-Factor + ESG strategies

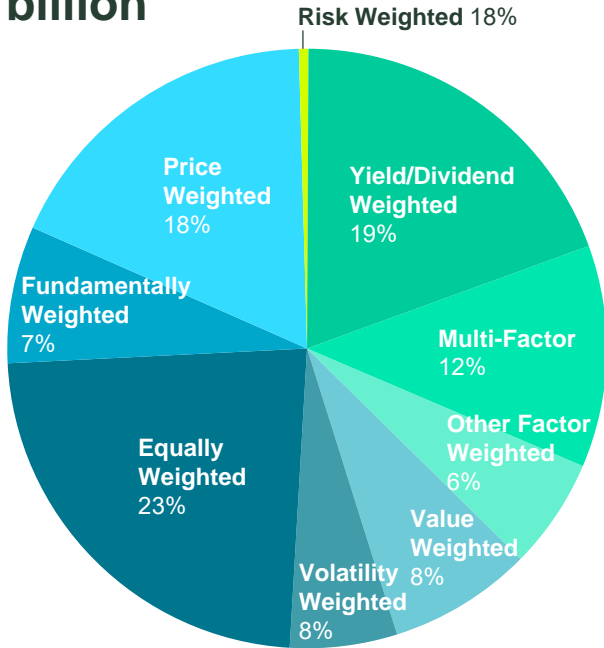


Source: State Street Global Advisors. Data as of September 30, 2018 in USD.

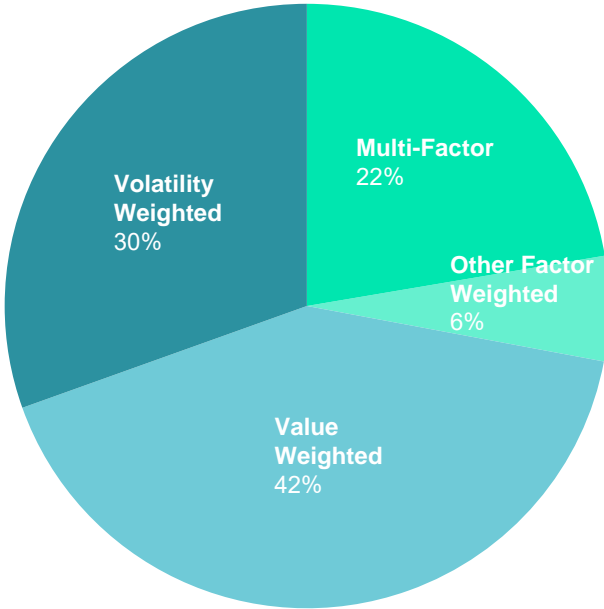
Expertise in Smart Beta Portfolio Development and Implementation

Total Smart Beta AUM: \$140 Billion

Index Provider Smart Beta Assets: \$125 billion



Proprietary Smart Beta Assets: \$15 billion



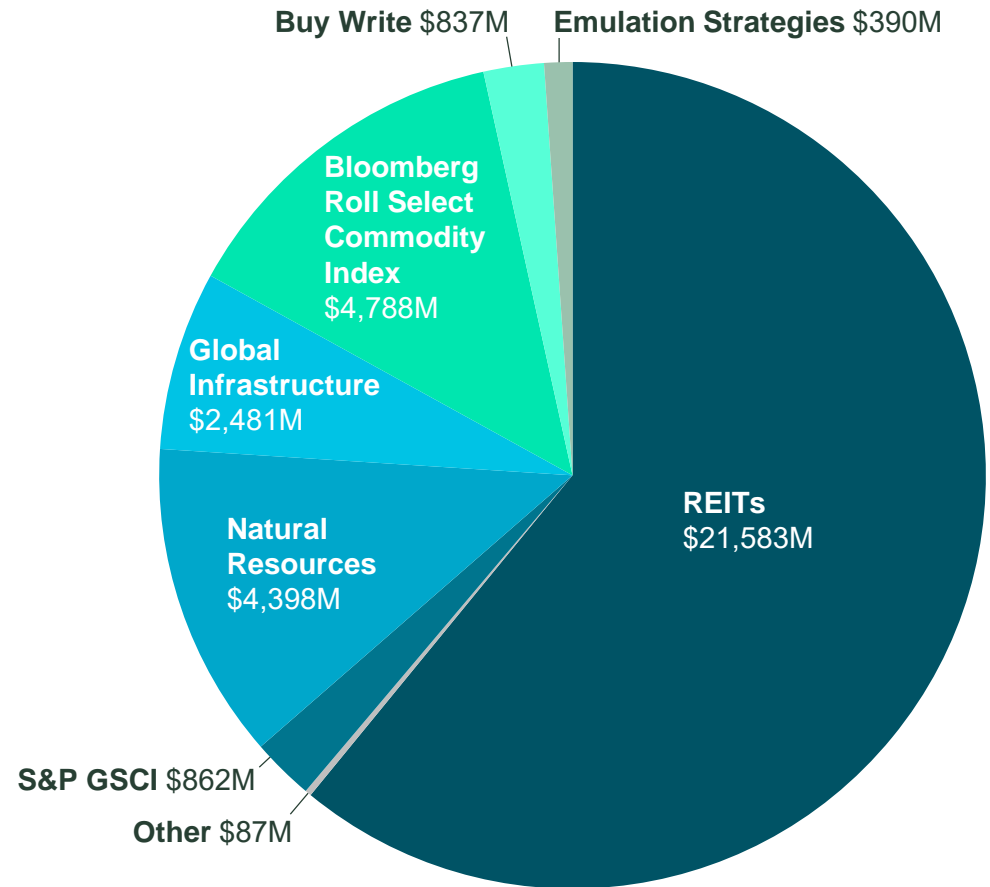
As of September 30, 2018. All figures in USD.

Alternative Asset Betas

Commodities, REITs & Additional
Alternative Asset Classes

\$35,425 Million

AUM as of September 30, 2018



Source: State Street Global Advisors. Data as of September 30, 2018 in USD.

How We Do It

Index Equity Management Techniques

Benchmark returns can be achieved through....

Replication

Hold all or the majority of securities in the index at approximately market cap weight

Typically applied to reasonable sized portfolios with minimal liquidity or accessibility constraints

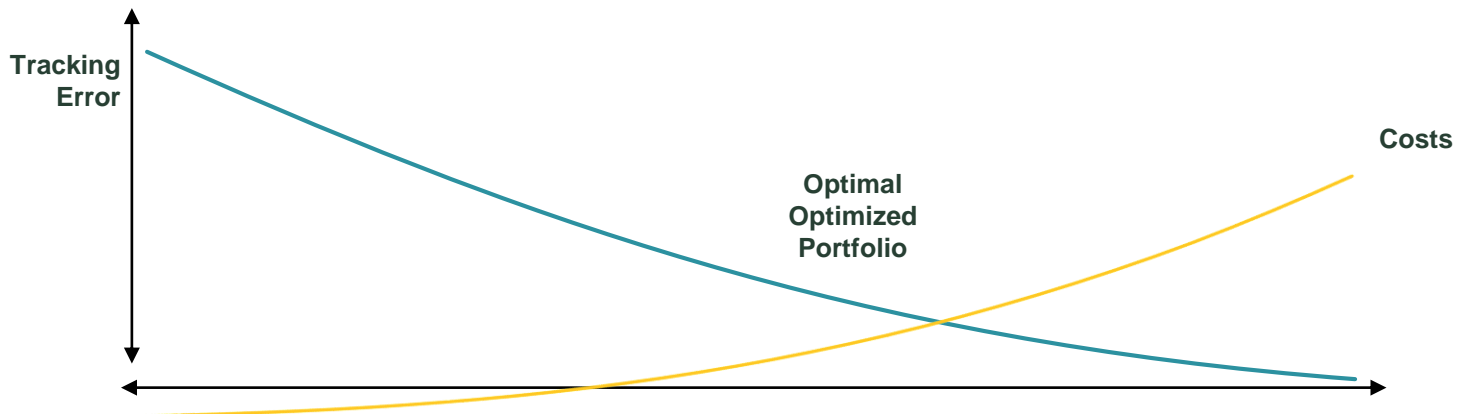
- i.e., US large cap or developed international

Optimization

Construct a portfolio with the same risk & return characteristics of the index but with a smaller subset of securities

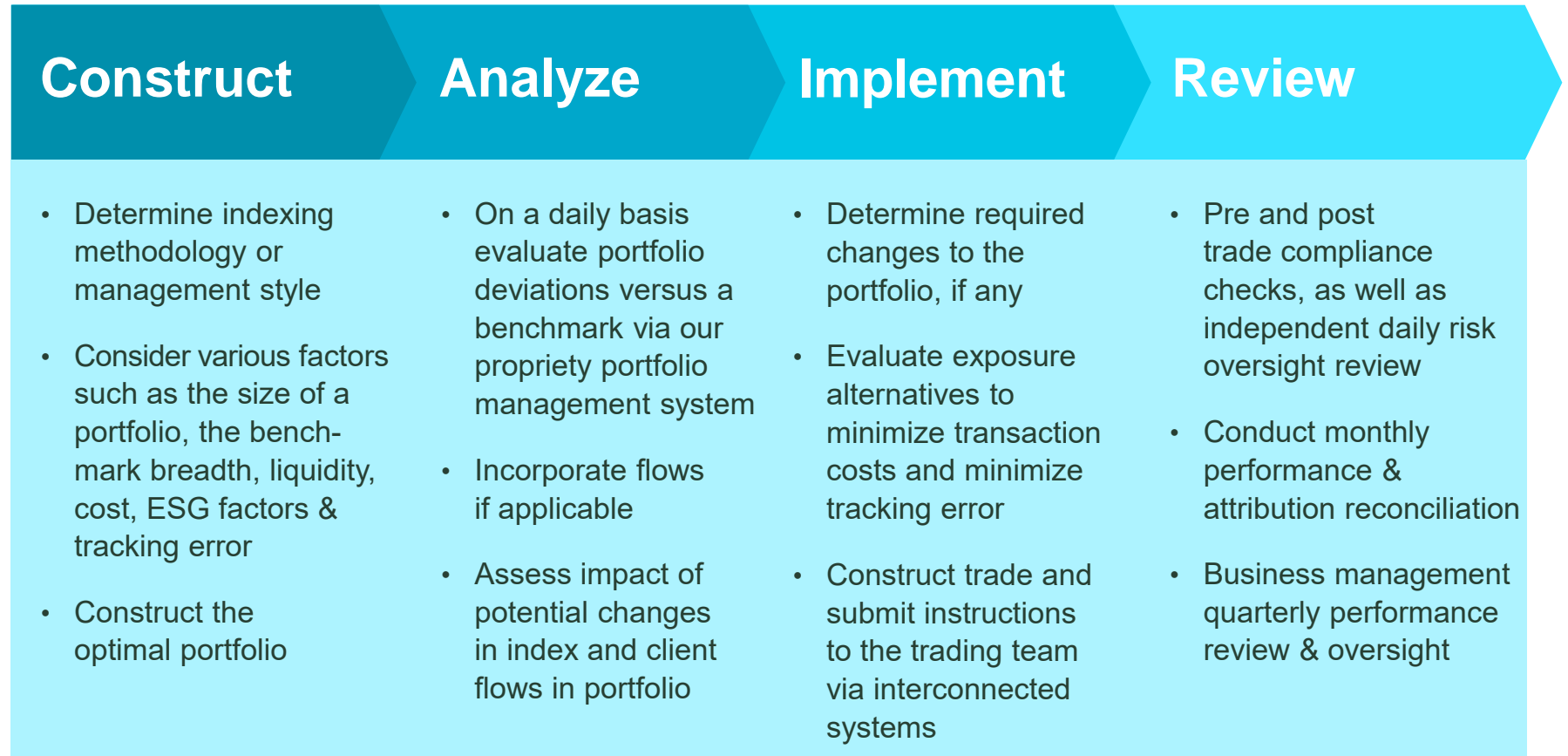
Typically applied to liquidity constrained portfolios

- i.e., International small cap (EM) or smaller sized portfolios



Investment Process

A tried and tested process marrying human insight and technology



Source: State Street Global Advisors

Improving Risk Controls & Oversight Through Technology

Features of our portfolio management system:

- Full data integration with other State Street Global Advisors applications and risk/oversight teams
- Designed and customized to our process, workflow and portfolio universe
- Provides a comprehensive portfolio view for portfolio management, as well as risk and oversight
- Dedicated software development resources to ensure continuous development and improvements



Source: State Street Global Advisors

How We Add Value

Why Choosing The Right Index Manager Matters?

Indexes make numerous assumptions, which can lead to mistracking (+/-), and wealth erosion if not managed with precision and skill

| Index Assumptions | Reality |
|--|---|
| No transaction costs | Effective implementation techniques can minimize implicit and explicit costs (i.e., internal crossing) |
| All trades executed at market on close | Trading strategies can reduce turnover and improve execution |
| Dividends reinvested at ex date — before cash received | Equitize cash with futures when possible to minimize cash drag |
| Maximum foreign dividend withholding tax rate | Investors realize different withholding tax rates relative to the index, resulting in income via tax reclaims |
| Assumed corporate action elections | Multiple options may exist presenting opportunities to add value |
| Dividends are the only income source | Income from securities litigation payments or securities lending can help offset negative tracking* |

* Other sources of tracking deviation may include but are not limited to transactions costs, taxes, cash drag, futures tracking versus the benchmark or securities mis-weights.

Adding Value Through Effective Implementation

Index Reconstitution

Pursue the best outcome for the client

Portfolio Rebalancing

Be pragmatic
It doesn't always make sense to trade

Index Events

Research corporate actions/events to assess impact fully and manage risk

Trading

Determine the most cost-efficient approach

Scrip Dividends

Look for the Premium Cash versus stock

Derivatives

Used to overlay cash and synthesize full exposure to equity markets

Stock Lending

Can help offset costs and potentially add value

Core Beta Research

Continuously look for opportunities to improve and evolve implementation

ESG integration/screening to our portfolios.

Global Organized Trading (GOT): Adding Value Through Trading

Strategy Design Using Expert Inputs

GOT Results

Trading

Historically achieving better trading prices relative to the index provides meaningful results

Portfolio Management

Research

2015*: \$70M+

2016*: \$11M+

Transaction Costs

2017*: \$48M+

Source: State Street Global Advisors. As of December 31, 2017. Figures in USD and approximate. This represents the aggregate gain/loss for both base and special situations.

* This includes MSCI, FTSE and S&P events. Only 2017 includes other ad-hoc intra-quarter dates.

Portfolio Rebalancing: Be Pragmatic

Example: S&P Quarterly Rebalance March 2017

| | S&P500 Index | S&P400 Index | S&P600 Index |
|-----------------------|---|---|---|
| Rebalance Turnover | 0.87% | 4.27% | 4.13% |
| Traded | 0.55% approx. <small>(Typical State Street Global Advisors S&P500 portfolio)</small> | 3.92% <small>(Typical State Street Global Advisors S&P400 portfolio)</small> | 3.75% <small>(Typical State Street Global Advisors S&P600 portfolio)</small> |
| Reduction in Turnover | 24% | 8% | 9% |

By monitoring ex-ante tracking closely, we can avoid trading some of the smaller names of a given index rebalance. This **reduces the overall turnover** of a portfolio and also **reduces the transaction costs** associated with it.

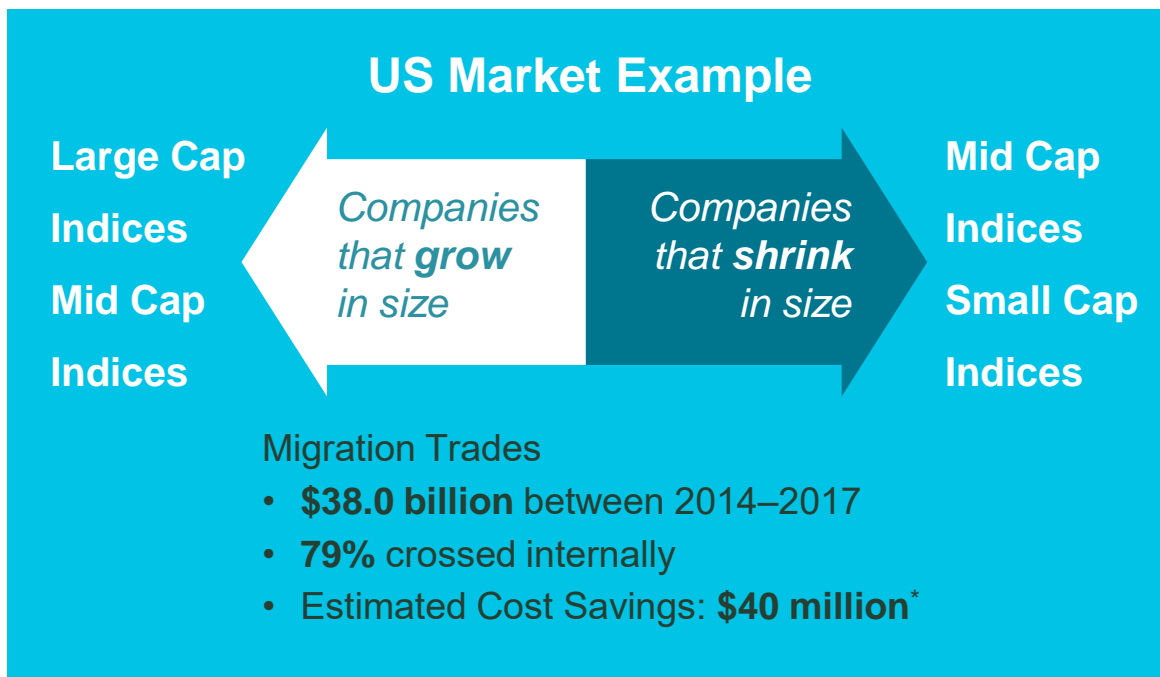
Source: State Street Global Advisors. For illustrative purposes only.

Minimizing Turnover Through Internal Crossing

Index Migrations

Companies regularly move between indices

A diverse book of business creates opportunities to reduce transaction costs around index change events



As of December 2017 updated annually. Source: State Street Global Advisors. All figures are in USD. Availability of internal crossing at State Street Global Advisors may be affected by your asset class, vehicle type, jurisdiction, or other factors. * Impact and spread cost estimates are based on calculations provided by vendor tools that specialize in these estimations but are proprietary to the vendor. Commissions, taxes, and other explicit cost estimates are based on standard schedules published within State Street Global Advisors but may vary from the results experienced in actual trading. Savings are calculated by multiplying the estimated market trading costs (ranging from 10 to 20 basis points—depending on liquidity type and region) by the relevant trade volume amount. US large cap stocks account for about 64% of the noted savings.

Russell Reconstitution Trade Crossing

- Turnover due to rebalancing for the annual Russell Reconstitution totaled **\$55 billion** for the combined years 2015–2018
- Over **\$30 billion was crossed internally**. This represents an average crossing rate for the period of **55%**.
- Estimated costs to trade a full slice of US large cap stocks in the open market is 10 bps while it costs about 20 bps for US mid/small cap stocks
- **Savings** passed on to our clients are estimated to be approximately **\$34 million¹** from 2015

Russel Index Family

| | |
|--------------------|--------------------|
| Russel 1000 | Russel 2000 Growth |
| Russel 1000 Growth | Russel 2000 Value |
| Russel 1000 Value | Russel 3000 |
| Russel 2000 | Russel Small Cap |

**State Street Global Advisors US
Russell Assets Under Management²:
\$157B**

Source: State Street Global Advisors. All currency figures in USD. Updated annually. ¹ As of June 30, 2018. Availability of internal crossing at State Street Global Advisors may be affected by your asset class, vehicle type, jurisdiction, or other factors. ² Impact and spread cost estimates are based on calculations provided by vendor tools that specialize in these estimations but are proprietary to the vendor. Commissions, taxes, and other explicit cost estimates are based on standard schedules published within State Street Global Advisors but may vary from the results experienced in actual trading. Savings are calculated by multiplying the estimated market trading costs (ranging from 5 to 20 basis points--depending on liquidity type and region) by the relevant trade volume amount. US large cap stocks account for about 70% of the noted savings.

Internal Crossing: A Powerful Source of Cost Savings & Liquidity

| | Total Value ⁴ | In-kind ³ /Internal Crossing/ Unit Crossing | Estimated Cost Savings ⁵ | Transaction Cost Savings ⁵ |
|--|--------------------------|---|-------------------------------------|---------------------------------------|
| US Market Case Study¹ (2015–2017) | \$108.5 Billion | 90.1% of the Total | 0.06% of the Total | \$64.4M |
| Non-US Developed Case Study² (2015–2017) | \$30.9 Billion | 75.9% of the Total | 0.23% of the Total | \$71.1M |

Availability of internal crossing at State Street Global Advisors may be affected by your asset class, vehicle type, jurisdiction, or other factors.

¹ Based on actual client order flow trading activity in the S&P 500® Defined Contribution Commingled Fund.

² Based on actual client order flow trading activity in the Bi-Monthly EAFE ERISA Commingled Funds.

³ In-kind transfers are redemptions/contributions made via security transfers.

⁴ For calendar years 2015–2017. It is not known whether similar results have been achieved after 2017.

⁵ This represents estimated average savings across all aggregate trading over the period. These estimates are based on subjective judgments and assumptions and do not reflect the effect of unforeseen economic and market factors on decision making. There is no guarantee that a particular client transaction will experience the same level of savings. In fact, savings could differ substantially. Any savings is contingent upon other activity taking place on a given transaction day. Had other funds been selected, different results of transaction cost savings may have been achieved. All figures are in USD.

Derivatives and Other Exposures

While the goal is to remain fully invested in stocks & invest locally but
it may not be possible or the most pragmatic approach

Index Futures

Portfolios hold some residual cash to either to accommodate daily cash flows or because of dividend accruals

Futures provide a cost-efficient and liquid way of gaining exposure to the underlying index while minimizing cash drag and trading costs

Other Exposures

Investing locally is preferred; however, accessibility and cost in some markets can presents challenges

ADRs/GDRs or swaps can be used in place of locally listed securities

Securities Lending: Can Help Offset Costs and Potentially More

Securities Lending

Act of loaning a security for a specified period of time to generate additional income

Program Overview

Leading securities lending provider since 1974

Managed through State Street Securities Finance (SSSF):

- Lendable assets of \$3.86T
 - 138 borrower relationships
 - Scale & market presence is attractive for high quality borrowers
 - Manages quality of borrowers & collateral diversification
-

Focus on income generation in a risk controlled manner

Global coverage across equities and fixed income

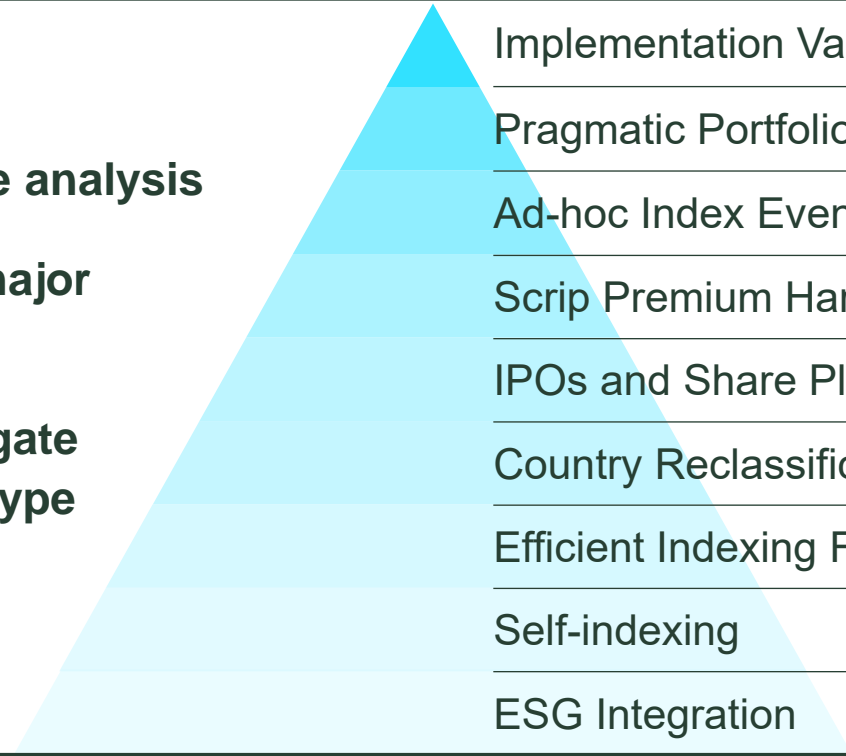
272 dedicated employees in 34 international markets

As of December 31, 2017. Figures in USD. Updated annually. Securities lending programs and the subsequent reinvestment of the posted collateral are subject to a number of risks, including the risk that the value of the investments held in the collateral may decline in value and may at any point be worth less than the original cost of that investment.

Core Beta Research: Overview

Improving portfolio implementation & building innovative core exposure strategies in an ever-evolving market microstructure

- **Robust quantitative analysis**
- **Coverage across major index families**
- **Ability to disaggregate index changes by type for further insight**



Implementation Value Add

Pragmatic Portfolio Rebalancing

Ad-hoc Index Events

Scrip Premium Harvesting

IPOs and Share Placings

Country Reclassifications

Efficient Indexing Frontier

Self-indexing

ESG Integration

The above information is for illustrative purposes only.

Why Choose State Street Global Advisors?

Indexing Skillfully Delivered

Research

Embedded research team delivering innovative solutions — such as factors, ESG and core beta implementation strategies

Client Centric Focus

Listen, understand and adapt to client needs and challenges

Performance

Deliver performance by striking the appropriate balance between return, risk and costs (>98% of funds have consistently tracked within expectations)*

Team

Tenured and stable team with dedicated portfolio managers averaging 19 years experience

Asset Stewardship

Effective steward of client assets with a coordinated firm wide proxy voting platform and focused engagement

Source: State Street Global Advisors. * Based on cumulative quarterly gross-of-fees returns for 1,322 GEBS managed pooled, and separate account portfolios from April 1, 2018 to June 30, 2018. Tracking error based on the difference between portfolio and benchmark cumulative returns.

Additional Information

Index Vehicle Considerations for Institutional Investors — US

| | CIT | Segregated Account | ETF | Mutual Fund | Notes |
|--|--|----------------------------------|---|---|---|
| Investor Eligibility | ERISA (DB & DC) & tax exempt entities | All Institutions | All | All | CITs and segregated accounts are not registered products. |
| Holding Period | Long | Long | Varies by client but typically <1 yr | Long | Institutions may use ETFs for tactical or short term purposes. However, longer term use cases may also apply. |
| Mandate Size | Some minimum size requirements | Preferably large | No size requirements | No size requirements | Mutual funds may have multiple share classes with different fee and investment minimums. |
| Relative Price Range | Low to Ultra-Low | Typically High with fee minimums | Ultra- Low to Mid | Low –High (varies by manager/fund) | Effective fee rates vary based on mandate size. However, CITs generally have a lower effective fee rate than other investment vehicles listed. |
| Ability to Replicate | Yes | Yes — assuming sufficient size | Yes | Yes | Replication may vary by strategy or mandate size. Generally, smaller segregated accounts and/or less liquid exposures may be optimized. |
| Customization | Possible but limited | Yes | No | No | CITs can be combined to create custom fund of fund structures. |
| Transaction Costs | Typically Lower | Higher | Typically lower* | Medium | CITs (ex DC funds) isolate t-costs at the individual client level., thus shielding market impact from other participate flows. ETFs can minimize t-costs through the 'create redeem' process. |
| Account set-up/ Opening & Maintenance | None for existing funds — some legal maintenance | Complex (all) | Purchased on exchange — registered fund | Purchased on exchange — registered fund | Set up time for segregated accounts can be complex and lengthy, particularly in the case of emerging markets. Additional legal attention and documentation are required as well. |

* Frequent trading of ETFs could significantly increase commissions and other costs such that they may offset any savings from low fees or costs.

Fixed Income Index Investing

A Leader in Fixed Income Indexing

We Offer Real Breadth and Depth in Fixed Income

- Managing fixed income index strategies for over 30 years
- Over 40 fixed income strategies offered globally
- Investment centres in Boston, London, Singapore, Sydney, and Tokyo

Our Heritage is Index Investing

- Over 30 portfolio managers and dedicated trading desk
- Our PMs average more than 15 years of experience
- Expertize across all major regions, currencies and sectors

Innovative Client Investment Solutions

- Market-leading research
- Real-world innovations that unlock new markets for investors
- ESG investment solutions

As of September 30, 2018

Intelligent Indexing in Fixed Income

Index Change Strategies

Minimize Turnover
Pursue the best outcome for the client

Portfolio Rebalancing

Be pragmatic
It doesn't always make sense to trade

Primary Markets

Look for the premium:
Access liquidity

Security Selection

Experienced portfolio managers skilfully incorporate relative value in sampling approach

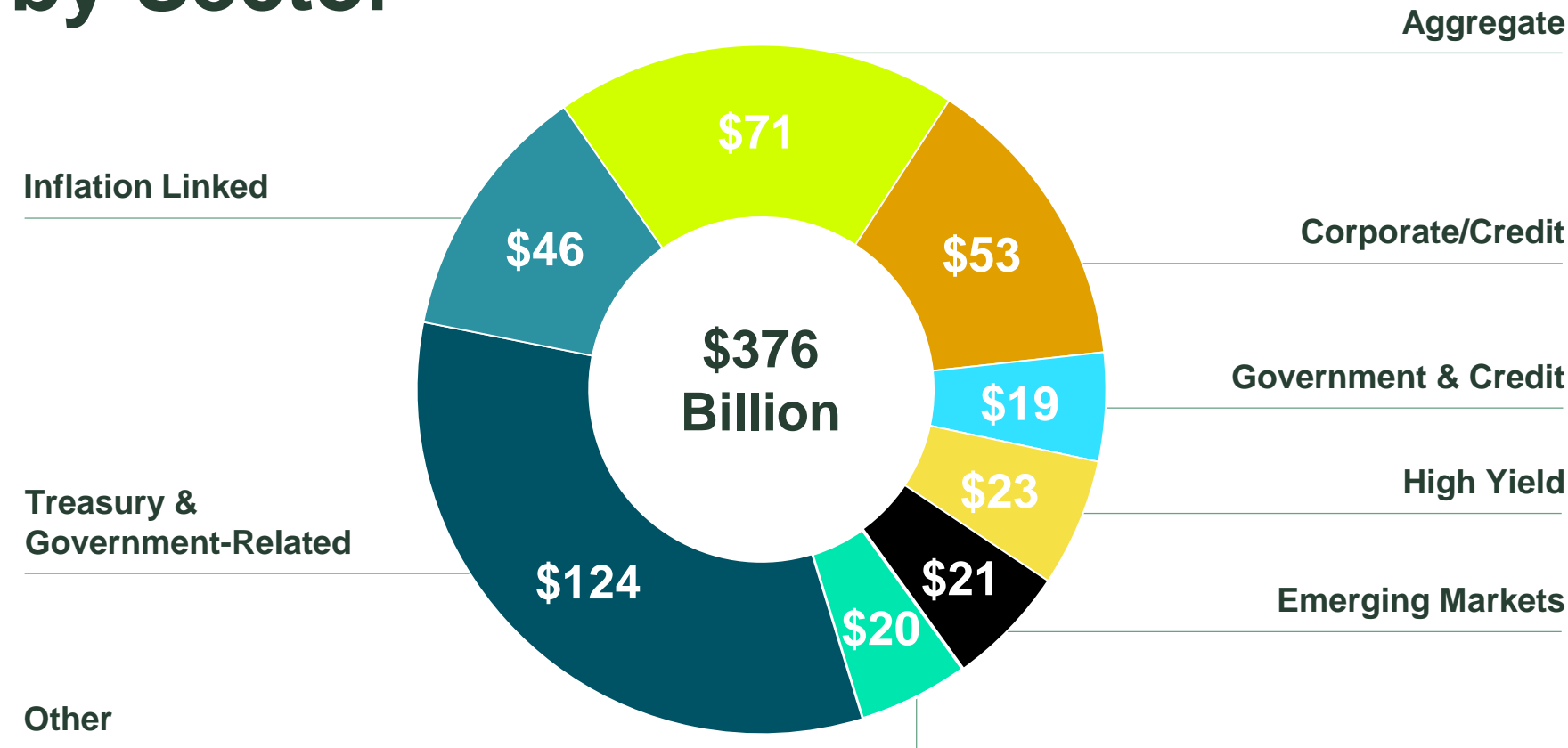
Trade Execution

Minimize costs
Experienced specialists, global reach and wide broker network

Minimising Tax Drag

Proactive positioning across taxable strategies (e.g., Emerging Market Debt)

Indexing Assets Under Management by Sector



As of September 30, 2018

Source: BIG (Fund View). Total Assets Under Management (AUM) is stated in USD and is for Fixed Income assets managed by the Fixed Income Beta Solutions team only, exclusive of all cash and securities lending assets and fixed income portfolios managed by ISG. All calculations are unaudited.

Other includes: indexing accounts with large degrees of customization, Convertible, Securitized and Municipal Indexing Strategies.

Fixed Income Indexing AUM of US\$376.07 bn is equivalent to: EUR 324.10 bn; GBP 288.63 bn ; CHF 369.28 (based on Bloomberg FX data as at date shown).

Research and Innovation

From Early Days

To Present Times

1993

Creators of the
World's First ETFs

SPDR®

2004

US High Yield
Indexed Strategy

2011

First Indexed Local
EM Bond Fund

2014

First US
Convertible Bond
Indexed ETF

2016

Multi-Factor Emerging
Markets Bond Strategy

Important Disclosure: ETFs managed by State Street Global Advisors have the oldest inception dates within the US, Hong Kong, Australia, and Singapore. State Street Global Advisors launched the first ETF in the US on January 22, 1993; launched the first ETF in Hong Kong on November 11, 1999; launched the first ETF in Australia on August 24, 2001; and launched the first ETF in Singapore on April 11, 2002.

Global Presence — Local Expertize

US Team

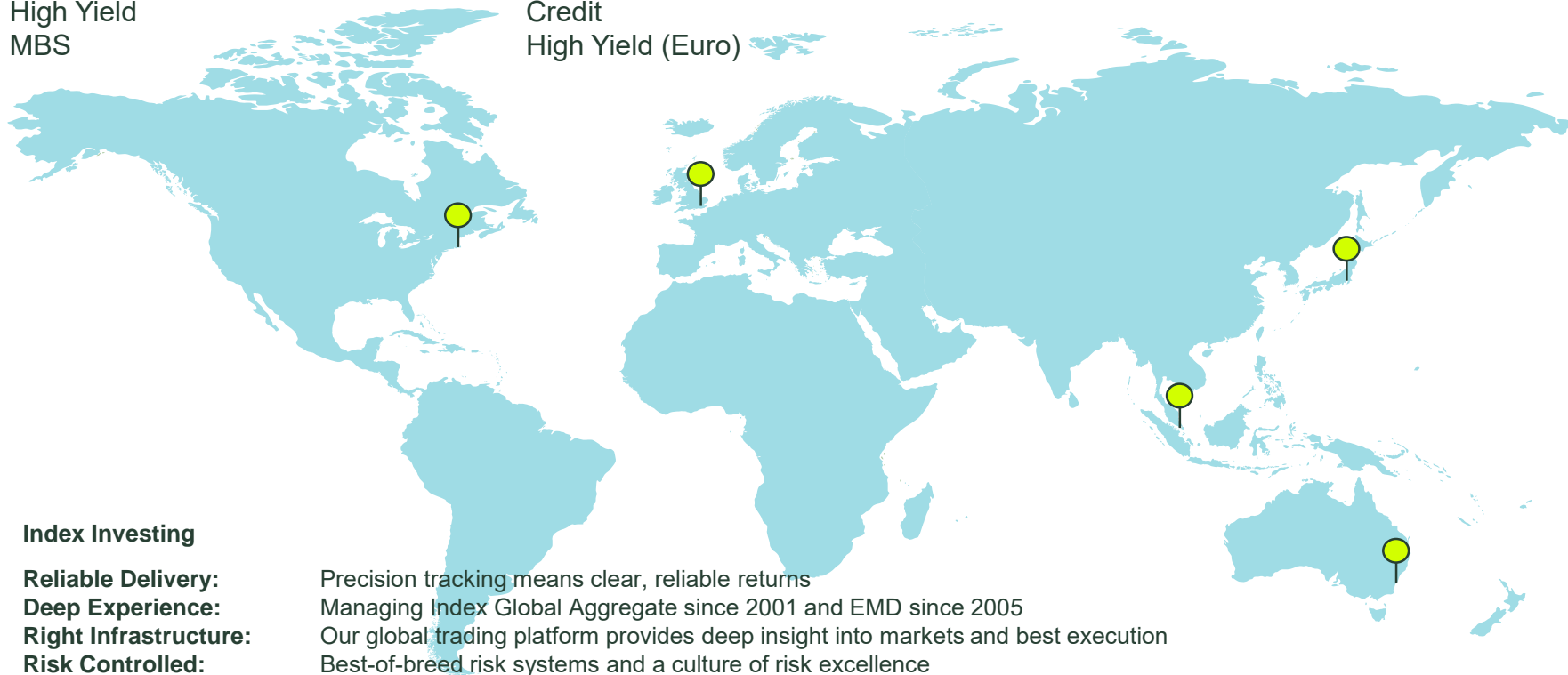
US Aggregate
Treasury
Credit
High Yield
MBS

European Team

European & Global Aggregate
Emerging Market Debt (HC & LC)
Treasury
Credit
High Yield (Euro)

Asia-Pacific Team

Asian Aggregate
Treasury
Credit



Index Investing

Reliable Delivery:

Deep Experience:

Right Infrastructure:

Risk Controlled:

Precision tracking means clear, reliable returns

Managing Index Global Aggregate since 2001 and EMD since 2005

Our global trading platform provides deep insight into markets and best execution

Best-of-breed risk systems and a culture of risk excellence

150+ Dedicated Fixed Income Professionals Globally

Global Chief Investment Officer



Matthew Steinaway, CFA

Indexed Fixed Income

Venky Venkataramani, CFA
Global Head of Fixed Income Beta

Indexing
Smart Beta

33 Investment Professionals

Macro Strategies

Matthew Nest, CFA
Global Head of Macro Strategies

Currency Solutions
Active Rates
Multi-sector Fixed Income

23 Investment Professionals

Credit Strategies

Chuck Moon
Global Head of Credit Strategies

High Yield
Investment Grade
Municipals
Structured Credit
Short Maturity Credit

23 Investment Professionals

Cash Management

Pia McCusker
Global Head of Cash Management

Cash Management
Securities Lending
Cash & Structured Credit Research
Enhanced Cash

22 Investment Professionals

Fixed Income Quantitative Research

Ramu Thiagarajan, PhD
9 Research Analysts

9 FI Portfolio Strategists & Specialists

Insurance Solutions

Mark Johnston
6 Investment Professionals

18 Traders
(11 Fixed Income & 6 FX)

Smart Beta

Collin Crownover, PhD

13 ESG & Corporate Governance Professionals*

As of September 30, 2018

* Cover Fixed Income and Equities.

CFA® is a trademark of the CFA Institute.

Specialization within Fixed Income

North America Index Investing Organization

Specialization provides the insights to manage multiple portfolios and is designed to deliver world-class index solutions and performance



Venky Venkataramani, CFA
Global Head of Fixed Income Index Strategies



Patrick Bresnehan, CFA
North America Head of Fixed Income Index Strategies

Credit

Mike Brunell, CFA
Brad Sullivan, CFA
Christopher Distefano
Kyle Kelly, CFA, FRM

Dave Marchetti, CFA
Frank Miethe, CFA
Read Burns
Christian Hoffmann, CFA

Global Rates

Jim Kramer
Orhan Imer, PhD, CFA
Nikita Imennov, PhD, FRM

Cindy Moy
Joanna Madden

Securitized

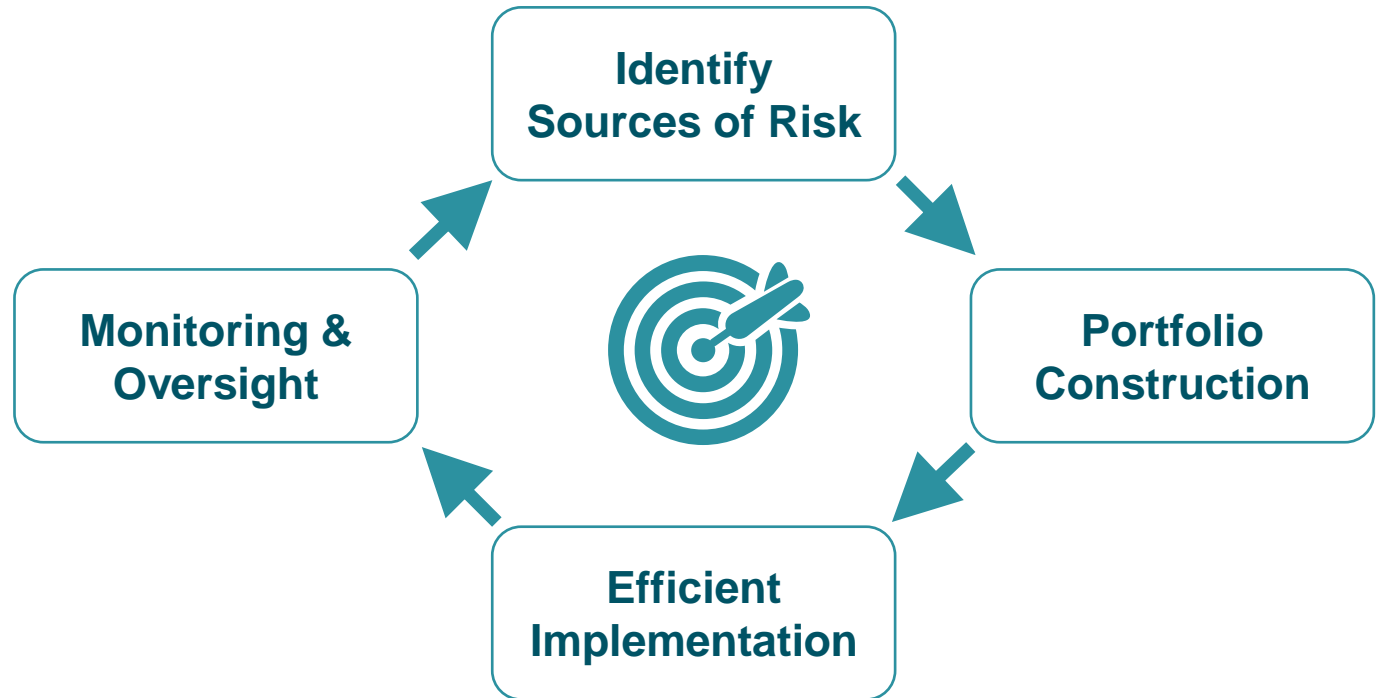
Marc DiCosimo, CFA
Nic Fischer, CFA
Mike Przygoda, CFA

Source: SSGA, as of September 30, 2018.

Index Investment Process

Index Investment Management Process

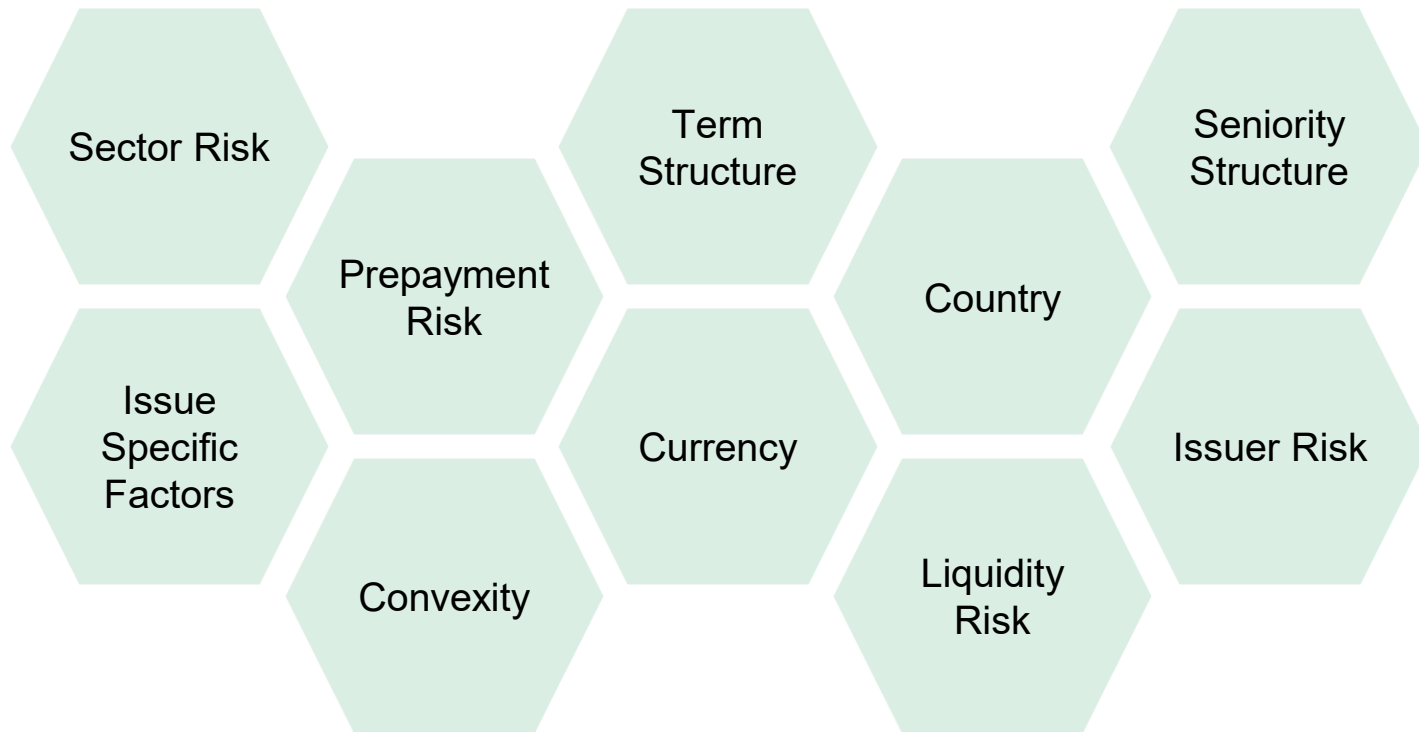
- We understand markets
- We manage risks and costs
- Aim to deliver superior index investment outcomes



Source: SSGA

We Identify Sources of Risk

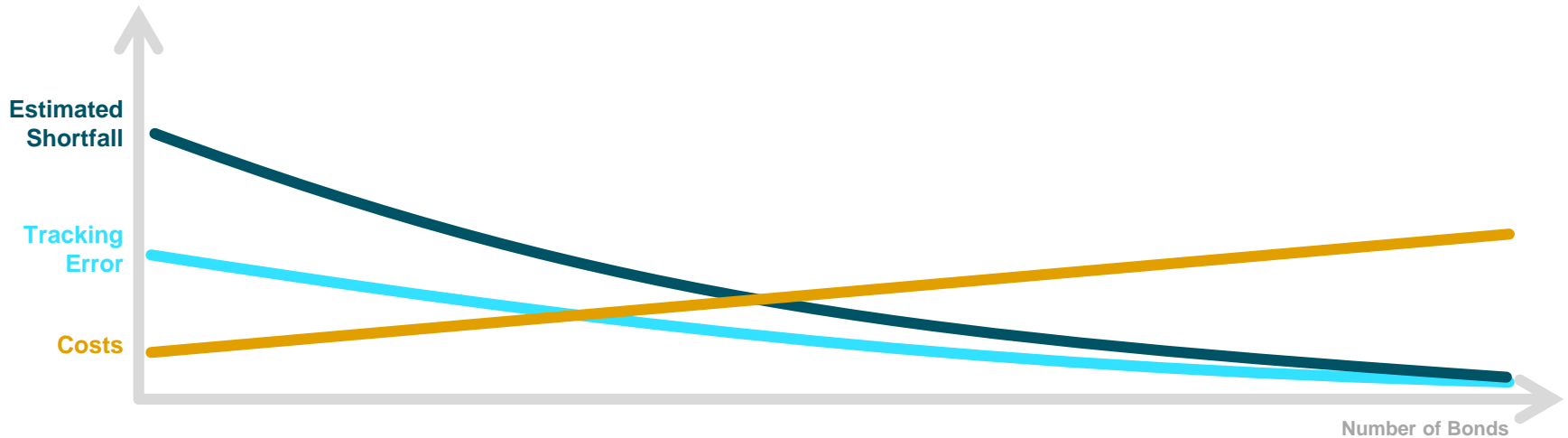
We slice the benchmark into precise risk categories and construct investment portfolios designed to deliver the desired investment outcome.



Source: SSGA

Constructing the Portfolio

Our stratified sampling process has a proven track record of delivering consistent investment outcomes



From Stratified Sampling

Best for broad investment-grade mandates
We aim to minimize risk exposures and limit trading costs to achieve consistent tracking error

To Full Replication

Employed in a small set of indices with highly liquid securities. High transaction costs may increase tracking error for larger indices

The above information is for illustrative purposes only.

We Trade and Implement Efficiently

Portfolio Managers Work with Our Dedicated Securitized Trading Desk to Achieve Best Execution

- Centralized trading desk
- Dedicated EMD, Credit and MBS Traders

Strong Relationship with Major Broker/Dealers

- Leverage our size to achieve superior execution
- Trade in primary and secondary markets
- Adapt trading venue for size, instrument and conditions

Global Desk In Place For Over 16 Years

24-hour trading capabilities, with traders located in Boston, London, and Hong Kong

**34 Traders Servicing
243 Portfolio Managers Across
10 Investment Centres**

US\$2.3 trillion notional traded in 2017

**2.9 Million Tickets
Executed Last Year**

As of January 18, 2018. Asset classes include equity, fixed income, futures and currency Fixed Income figures include activity under Boston and London desks only.

Interconnected Functions Improve Control and Oversight



Proprietary PM System

- Designed and built around our portfolio management process and workflow
- Comprehensive view of portfolios
- Full data integration with other SSGA applications
- Continuous development and improvements

What We Deliver

Fixed income business with **proven track record**

Expertize across all major regions, currencies and sectors

Managed by an **experienced team** within a **disciplined framework**

Investment innovation unlocks new markets and strategies

Emphasis on **collaboration** to support clients in achieving the desired outcome

Appendix A: Important Disclosures

Important Disclosures

For Investment Professional Use Only.

Past performance is not an indicator of future results. Diversification does not ensure a profit or guarantee against loss.

Equity securities are volatile and can decline significantly in response to broad market and economic conditions.

Indexing strategies are managed with a passive investment strategy, attempting to track the performance of an unmanaged index of securities. As a result, indexing strategies may hold constituent securities of the Index regardless of the current or projected performance of a specific security, which could cause their return to be lower than if they employed an active strategy. While the strategy seeks to track the performance of the Index as closely as possible, its return may not match or achieve a high degree of correlation with the return of the Index due to operating expenses, transaction costs, cash flows and operational inefficiencies.

Foreign investments involve greater risks than US investments, including political and economic risks and the risk of currency fluctuations all of which may be magnified in emerging markets. Investing in foreign domiciled securities may involve risk of capital loss from unfavourable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations. Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

Investing in futures is highly risky. Futures positions are considered highly leveraged because the initial margins are significantly smaller than the cash value of the contracts. There are a number of risks associated with futures investing including but not limited to counterparty credit risk, basis risk, currency risk, derivatives risk, foreign issuer exposure risk, sector concentration risk, leveraging and liquidity risks.

Derivative investments may involve risks such as potential illiquidity of the markets and additional risk of loss of principal.

Investing involves risk including the risk of loss of principal. Past performance is not a guarantee of future results.

This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected. The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor. All material has been obtained from sources believed to be reliable. There is no representation or warranty as to the accuracy of the information and State Street shall have no liability for decisions based on such information.

Bonds generally present less short term risk and volatility than stocks, but contain interest rate risk (as interest rates rise bond prices usually fall); issuer default risk; issuer credit risk; liquidity risk; and inflation risk. These effects are usually pronounced for longer-term securities. Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Investing in high yield fixed income securities, otherwise known as "junk bonds", is considered speculative and involves greater risk of loss of principal and interest than investing in investment grade fixed income securities. These Lower-quality debt securities involve greater risk of default or price changes due to potential changes in the credit quality of the issuer.

Important Disclosures

Government bonds and corporate bonds generally have more moderate short-term price fluctuations than stocks, but provide lower potential long term returns.

ETFs trade like stocks, are subject to investment risk, fluctuate in market value and may trade at prices above or below the ETFs net asset value. Brokerage commissions and ETF expenses will reduce returns.

Passively managed funds invest by sampling the index, holding a range of securities that, in the aggregate, approximates the full Index in terms of key risk factors and other characteristics. This may cause the fund to experience tracking errors relative to performance of the index.

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United States: State Street Global Advisors, One Iron Street, Boston, MA 02210-1641.

Web: www.ssga.com

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Tracking Code: 2386596.1.1.AM.INST

Expiration Date: May 31, 2019

Appendix B: Biography

Biography



Sonya K. Park

Sonya is a Vice President of State Street Global Advisors and a Senior Relationship Manager in the San Francisco Office. She is responsible for managing existing SSGA client relationships and driving new business development in the Western U.S. Prior to joining State Street Global Advisors in 2011, Sonya was a Vice President at Dimensional Fund Advisors in the Institutional Sales & Services Group.

Prior to Dimensional Fund Advisors, Sonya was an Associate Director at Watson Pharmaceuticals. Sonya has also worked at Lehman Brothers as an Equity Research Analyst and began her career at SEI Corporation.

Sonya earned a BA from the University of Pennsylvania and an MBA from the NYU Stern School of Business and has been working in the financial services industry since 1993. Sonya holds the FINRA 7 and 63 registrations. Sonya also holds the NFA Series 3 and is an Associated Person of SSGA Funds Management, Inc. ('SSGA FM') SSGA FM is a Commodity Trading Advisor registered with the Commodity Futures Trading Commission.

OFFICE OF HAWAIIAN AFFAIRS
Action Item

Committee on Resource Management

February 13, 2019

RM #19- 01

Action Item Issue: Member Approval of procedures to change the management structure of Hi`ilei Aloha LLC and Ho`okele Pono LLC

Prepared by:




Albert Tiberi
Ka Paepae Puka, Senior Legal Counsel

2/12/19

Date

Reviewed by:




Sylvia Hussey
Ka Pou Nui, Chief Operating Officer

2/12/19

Date

Reviewed by:



Ke Kua, Dan Ahuna
Luna Ho`omalua Kōmike RM, RM Chairperson

2/12/19

Date

I. Proposed Action:

Authorize and Approve OHA Administration to develop position descriptions and selection process for new manager positions and to recruit three new managers to replace current Hi`ilei Aloha LLC and Ho`okele Pono LLC managers.

II. Issue:

The current managers of the LLCs are OHA's CEO, COO and CFO. As the member of Hi`ilei Aloha LLC and Ho`okele Pono LLC, OHA has the authority to appoint new permanent manager(s) if a management change is desired.

III. Discussion:

A. Background. OHA is the sole member of two LLCs: Hi`ilei Aloha LLC and Ho`okele Pono LLC. Hi`ilei Aloha LLC is the sole member of two LLCs: Hi`ipaka LLC and Hi`ikualono LLC. Ho`okele Pono LLC is the sole member of Ho`okipaipai LLC. Each LLC is a manager-managed Hawaii limited liability company whose managers are OHA's CEO, COO and CFO. Hi`ikualono LLC, a subsidiary of Hi`ilei Aloha LLC, exists, but is inactive.

B. Summary. If the BOT wishes to alter the current management structure, prior to permanently replacing the current managers, the BOT should approve a Transition plan (the “Transition Plan”) that includes: (1) determining whether to replace current managers with a single manager or board of three managers, (2) authorizing the amendment of the LLCs’ Operating Agreements to reflect desired changes, (3) creation and approval of a job description and salary range for the manager positions, (4) identification and approval of funds to recruit and pay for the manager(s), (5) recruitment for the permanent replacement of the present managers, and (5) selection process for new manager(s).

IV. Recommended Action:

Authorize and Approve OHA Administration to develop position descriptions and a selection process for new manager positions and to recruit three new managers to replace current Hi`ilei Aloha LLC and Ho`okele Pono LLC managers.

V. Alternatives:

Authorize and Approve OHA Administration to develop a position description and a selection process for one new manager position and to recruit single new manager to replace current Hi`ilei Aloha LLC and Ho`okele Pono LLC managers.

VI. Time Frame: Immediate action is recommended.

VII. Funding Source and Certification of Funding Availability:

No funds needed at this time.

VIII. Attachment(s): None.